Lake Ditch contributes perennial surface water flow to the White River, a TNW, UNT 4 to Lake Ditch is likely to be considered a *Waters of the United States*.

UNT 5 to Lake Ditch (169.2 lft./0.0395 acre of free flowing channel within survey area)

UNT 5 to Lake Ditch was observed within the survey area, the stream is located 0.18 mile west of CR 675 W and was flowing at the time of investigation. UNT 5 to Lake Ditch was determined to have intermittent flow due to water in the channel with more than 48 hours since a significant rain event. Additionally, UNT 5 to Lake Ditch is classified as an USGS intermittent blueline stream. UNT 5 to Lake Ditch flows in a northeast to southwest direction away from the survey area. According to the USGS StreamStats Report, this stream has a drainage area of 0.922 square mile and a gradient of 20.1 feet per mile. UNT 5 to Lake Ditch exhibited a OHWM characteristics of 11.5 feet in width and 3.0 feet in depth. The downstream OHWM measurement was taken approximately 62.2 feet from the structure outlet. UNT 5 to Lake Ditch exhibited an upstream OHWM of 10.5 feet in width and 3.0 feet in depth which was taken approximately 88.9 feet from the structure. The OHWM measurements were taken outside the influence of the structure.

This stream exhibited a substrate primarily of silt. This stream exhibited poor quality due to lack of sinuosity, channelization, an absence of riffles and pools, and agricultural runoff. UNT 5 to Lake Ditch flows into Lake Ditch which then flows into Mill Creek, which flows into Eel River, which flows into the White River. Since UNT 5 to Lake Ditch contributes intermittent surface water flow to the White River, a TNW, UNT 5 to Lake Ditch is likely to be considered a *Waters of the United States*.

UNT 5 to Lake Ditch CV (45 lft./0.017 acre of encapsulated stream within survey area)

UNT 5 to Lake Ditch CV is encapsulated within Structure No. CV 042-055-51.40, which is a 16.4 feet wide x 45 feet long corrugated metal pipe (CMP).

UNT 6 to Lake Ditch (183.55 lft./ 0.0116 acre of free flowing channel within survey area)

UNT 6 to Lake Ditch was observed within the survey area, the stream is located 0.07 mile west of Shupe Road, directly north of SR 42. The stream was flowing at the time of investigation. UNT 6 to Lake Ditch flows in a west to southeast direction away from the survey area. UNT 6 to Lake Ditch was determined to have intermittent flow due to water in the channel with more than 48 hours since a significant rain event. Additionally, UNT 6 to Lake Ditch is classified as an USGS intermittent blueline stream. According to the USGS StreamStats Report, this stream has a drainage area of 0.159 square mile and a gradient of 45.4 feet per mile. UNT 6 to Lake Ditch exhibited an upstream OHWM characteristics of 2.75 feet in width and 0.5 feet in depth. The upstream OHWM measurement was taken approximately 48.3 feet from the structure outlet. The OHWM measurement was taken outside the influence of the structure. A downstream OHWM was not taken as there was no evidence of a stream south of structure CV 042-055-50.80 or beyond the scour hole created at the end of the structure. It is likely that the UNT 6 is encapsulated in a tile drain outside the survey area, as is evident by the concrete drain/inlet on the south side of the scour hole, which captures overflow from UNT 6.

This stream exhibited a substrate predominately of silt. This stream exhibited poor quality due to lack of sinuosity, channelization, an absence of riffles and pools, and agricultural runoff. UNT 6 to Lake Ditch flows into Lake Ditch which then flows into Mill Creek, which flows into Eel River, which flows into the White River. Since UNT 6 to Lake Ditch contributes intermittent surface water flow to the White River, a TNW, UNT 6 to Lake Ditch is likely to be considered a *Waters of the United States*.

UNT 6 to Lake Ditch CV (93 lft./ 0.0358 acre of encapsulated stream within survey area)

UNT 6 to Lake Ditch CV is encapsulated within Structure No. CV 042-055-50.80, which is a 16.8 feet wide x 93 feet long CMP.

UNT 7 to Lake Ditch (67 lft./0.0084 acre of free flowing channel within survey area)

UNT 7 to Lake Ditch was observed within the survey area, the stream is located directly south of Wheeler Road, west of Evans Road. The stream was flowing at the time of investigation. UNT 7 to Lake Ditch was determined to have intermittent flow due to water in the channel with more than 48 hours since a significant rain. Additionally,

F5 of 95

UNT 7 to Lake Ditch is classified as an USGS intermittent blueline stream. According to the USGS StreamStats Report, this stream has a drainage area of 0.035 square mile and a gradient of 31.8 feet per mile. UNT 7 to Lake Ditch flows in a north to south direction away from the survey area. UNT 7 to Lake Ditch begins at the outlet of Structure CV 042-055-48.78. UNT 7 to Lake Ditch exhibited a downstream OHWM characteristics of 5.5 feet in width and 2.75 feet in depth. The downstream OHWM measurement was taken approximately 65.2 feet from the structure outlet. The OHWM measurement was taken outside the influence of the structure.

UNT 7 to Lake Ditch exhibited poor quality due to lack of sinuosity, channelization, an absence of riffles and pools, and agricultural runoff. This stream exhibited a substrate primarily of silt. UNT 7 to Lake Ditch flows into Lake Ditch which then flows into Mill Creek, which flows into Eel River, which flows into the White River. Since UNT 7 to Lake Ditch contributes intermittent surface water flow to the White River, a TNW, UNT 7 to Lake Ditch is likely to be considered a *Waters of the United States*.

UNT 7 to Lake Ditch CV (55 lft./0.058 acre of encapsulated stream within survey area)

UNT 7 to Lake Ditch CV is encapsulated within Structure No. CV 042-055-54.25, which is a 2.5 feet wide x 55 feet long corrugated metal pipe (CMP).

UNT 8 to Lake Ditch (909.9 lft./0.10 acre within survey area)

UNT 8 to Lake Ditch was observed within the survey, the stream is located south of SR 42, 0.33 mile east of Measel Road. The stream was not flowing at the time of investigation, however there was standing water in the channel. UNT 8 was determined to have ephemeral flow due to rooted plants established in the streambed. Additionally, UNT 8 to Lake Ditch is not classified as an USGS blueline stream. UNT 8 to Lake Ditch flows in a west to southeast direction away from the survey area. Aerial imagery shows that the stream flows into a drainage swale, which eventually flows into Lake Ditch. According to the USGS StreamStats Report, this stream has a drainage area of 0.189 square mile and has a gradient of 32 feet per mile. UNT 8 to Lake Ditch exhibited a downstream OHWM characteristics of 5.0 feet in width and 2.75 feet in depth. The downstream OHWM measurement was taken approximately 150 feet from the structure outlet. UNT 8 to Lake Ditch exhibited an upstream OHWM of 5.0 feet in width and 2.5 feet in depth which was taken approximately 78.2 feet from the structure outlet. The OHWM measurements were taken outside the influence of the structure. UNT 8 to Lake Ditch is located south of structure CV 042-055-47.90.

This stream exhibited a substrate primarily of silt. This stream exhibited poor quality due to an absence of riffles and pools, channelization, and agricultural runoff. UNT 8 to Lake Ditch is likely not a *Waters of the United States* as it does not contribute perennial or intermittent overland flow to a TNW.

UNT 9 to Lake Ditch (80.3 lft./0.012 acre within survey area)

UNT 9 to Lake Ditch was observed within the survey area, the stream is located just south of SR 42, 0.25 mile west of Measel Road. The stream was flowing at the time of investigation. UNT 9 to Lake Ditch flows in a north to south direction away from the survey area. UNT 9 to Lake Ditch was determined to have intermittent flow due to water in the channel with more than 48 hours since a significant rain event. Additionally, UNT 9 to Lake Ditch is classified as an USGS intermittent blueline stream. According to the USGS StreamStats Report, this stream has a drainage area of 0.423 square mile and a gradient of 29.3 feet per mile. UNT 9 to Lake Ditch exhibited a downstream OHWM characteristics of 6.25 feet in width and 2.25 feet in depth. The downstream OHWM measurement was taken approximately 55.8 feet from the structure outlet. The OHWM measurement was taken outside the influence of the structure. An upstream OHWM was not taken as there was no evidence of a stream north of structure CV 042-055-47.32.

UNT 9 to Lake Ditch exhibited poor quality due to lack of sinuosity, channelization, an absence of riffles and pools, and agricultural runoff. This stream exhibited a substrate primarily of silt. UNT 9 to Lake Ditch flows into Lake Ditch which then flows into Mill Creek, which flows into Eel River, which flows into the White River. Since UNT 9 to Lake Ditch contributes intermittent surface water flow to the White River, a TNW, UNT 9 to Lake Ditch is likely to be considered a *Waters of the United States*.

F6 of 95

Lake Ditch (195.9 lft./0.18 acre within survey area)

Lake Ditch was observed within the survey area, the stream transects SR 42, 0.25 mile northwest of Gore Road. Lake Ditch flows in a northeast to southwest direction away from the survey area. Lake Ditch was determined to have perennial flow due to lack of rooted plants in the stream bed and a well-defined bed/bank. Additionally, Lake Ditch is classified as an USGS perennial blueline stream. According to the USGS StreamStats Report, Lake Ditch has a drainage area of 37.214 square miles and a gradient of 5.27 feet per mile. Lake Ditch exhibited a downstream OHWM characteristics of 40.0 feet in width and 7.0 feet in depth. The downstream OHWM of 38 feet in width and 7.0 feet in depth which was taken approximately 52.1 feet from the structure outlet. Lake Ditch exhibited an upstream OHWM measurements were taken outside the influence of the structure.

Lake Ditch exhibited poor quality due to channelization, lack of sinuosity, and agricultural runoff, however, the stream did exhibit riffles and pools. A significant number of swallow nests and swallows were observed under both the east and westbound bridges. This stream exhibited a substrate that consisted primarily of silt. Lake Ditch flows into Mill Creek, which then flows into Eel River, which flows into the White River. Since Lake Ditch contributes perennial surface water flow to the White River, a TNW, Lake Ditch is likely to be considered a *Waters of the United States*.

UNT 10 to Lake Ditch was observed within the survey area and was following at the time of investigation. UNT 10 to Lake Ditch flows into Lake Ditch which then flows into Mill Creek, which flows into Eel River, which flows into the White River. Since UNT 10 to Lake Ditch contributes perennial surface water flow to the White River, a TNW, UNT 10 to Lake Ditch is likely to be considered a *Waters of the United States*. The stream crosses the survey area in two places. Characteristics of each crossing are discussed below:

UNT 10 to Lake Ditch - First Crossing (92.9 lft./0.0085 acre of free flowing channel within survey area)

The First Crossing transects SR 42 and is located 0.04 mile west of the intersection of Gore Road and SR 42 and is located south approximately 1228 feet south of UNT 10 and Lake Ditch's confluence and was flowing at the time of investigation. UNT 10 to Lake Ditch is classified as a USGS perennial blueline stream at both crossings. UNT 10 to Lake Ditch (First Crossing) was determined to have perennial flow due to moderate sinuosity, lack of rooted plants in the streambed, and a well-defined bed/bank. Additionally, UNT 10 to Lake Ditch is classified as a USGS perennial blueline stream. The stream flows in a southeast to northwest direction to Lake Ditch. According to the USGS StreamStats Report, UNT 10 to Lake Ditch (First Crossing) has a drainage area of 0.879 square mile and has a gradient of 41.1 feet per mile. The stream exhibited a downstream OHWM characteristics of 7.75 feet in width and 2.0 feet in depth. The downstream OHWM measurement was taken approximately 57.1 feet from the structure outlet. UNT 10 to Lake Ditch exhibited an upstream OHWM of 7.75 feet in width and 1.67 feet in depth which was taken approximately 81 feet from the structure outlet. The OHWM measurements were taken outside the influence of the structure. This stream exhibited a substrate primarily of silt. The stream exhibited poor quality due to agricultural runoff however, the stream did exhibit riffle and pool complexes.

UNT 10 Lake Ditch – First Crossing CV (84 lft./ 0.0225 acre of encapsulated stream within survey area) UNT 10 Lake Ditch First Crossing CV is encapsulated within Structure No. 042-55-07613, which is an 11.7 feet x 84 feet long concrete pipe.

UNT 10 to Lake Ditch – Second Crossing (886.17 lft./0.154 acre of free flowing channel within survey area) The Second Crossing transects SR 42 and is located 0.11 mile south of the intersection of Gore Road and SR 42 and is located south approximately 0.11 miles south of where UNT 10 and Lake Ditch confluence and was flowing at the time of investigation. UNT 10 to Lake Ditch (Second Crossing) was determined to have perennial flow due to moderate sinuosity, lack of rooted plants in the streambed, and a well-defined bed/bank. UNT 10 to Lake Ditch is classified as a USGS intermittent blueline stream. The stream flows in a southeast to northwest direction to Lake Ditch. According to the USGS StreamStats Report, UNT 10 to Lake Ditch (First Crossing) has a drainage area of 0.796 square mile and has a gradient of 73.8 feet per mile. The stream exhibited a downstream OHWM characteristics of 7.75 feet in width and 2.0 feet in depth. The downstream OHWM measurement was taken approximately 15.3 feet from the structure outlet. UNT 10 to Lake Ditch exhibited an upstream OHWM of 7.75

F7 of 95

feet in width and 2.0 feet in depth which was taken approximately 55.6 feet from the structure outlet. The OHWM measurements were taken outside the influence of the structure. This stream exhibited a substrate primarily of silt. UNT 10 to Lake Ditch (Second Crossing) exhibited poor quality due to an absence of riffles and pools and agricultural runoff.

UNT 10 Lake Ditch – Second Crossing CV (60 lft./0.016 acre of encapsulated stream within survey area) UNT 10 Lake Ditch Second Crossing CV is encapsulated within Structure No. CV 042-055-44.05, which is a 11.0 feet wide x 60 feet long CMP.

UNT 11 to Lake Ditch (74.4 lft./0.0048 acre of free flowing channel within survey area)

UNT 11 to Lake Ditch was observed within the survey area and transects SR 42 approximately 0.04 mile north of North Street within the town of Eminence. UNT 11 to Lake Ditch was determined to have intermittent flow due to water in the channel with more than 48 hours since a significant rain event additionally, UNT 11 to Lake Ditch is classified as an USGS intermittent blueline stream. The stream was flowing at the time of investigation. UNT 11 to Lake Ditch flows in an east to west direction away from the survey area. According to the USGS StreamStats Report, UNT 11 to Lake Ditch has a drainage area of 0.212 square mile and a gradient of 77.5 feet per mile. UNT 11 to Lake Ditch exhibited a downstream OHWM characteristics of 5.0 feet in width and 1.0 foot in depth. The downstream OHWM measurement was taken approximately 49.9 feet from the structure outlet. UNT 11 to Lake Ditch exhibited an upstream OHWM of 4.67 feet in width and 1.0 foot in depth which was taken approximately 27.7 feet from the structure outlet. The OHWM measurements were taken outside the influence of the structure.

UNT 11 to Lake Ditch exhibited poor quality due to channelization, an absence of riffles and pools, lack of instream cover, however the stream did exhibit a fair amount of overhanging vegetation. This stream exhibited a substrate of silt and cobble. UNT 11 to Lake Ditch flows into Lake Ditch which then flows into Mill Creek, which flows into Eel River, which flows into the White River. Since UNT 11 to Lake Ditch intermittent surface water flow to the White River, a TNW, UNT 11 to Lake Ditch is likely to be considered a *Waters of the United States*.

UNT 11 Lake Ditch CV 042-55-07514 (97 lft./0.0149 acre of encapsulated stream within survey area)

UNT 11 Lake Ditch CV is encapsulated within Structure No. 042-55-07514, which is a 6.7 feet wide x 97 feet long CMP.

UNT 12 to Lake Ditch (11.6 lft./0.0007 acre within survey area)

UNT 12 to Lake Ditch was observed within the survey area, south of UNT 11 to Lake Ditch. Stream characteristics were only observed on the west side of SR 42, where the pipe (Unassigned Structure 5) outlets. UNT 12 to Lake Ditch was determined to have intermittent flow due to water in the channel with more than 48 hours since a significant rain event. UNT 12 to Lake Ditch is not a mapped USGS blueline stream. UNT 12 to Lake Ditch has a drainage area of 0.061 square mile and gradient of 133 feet per mile. Aerial imagery shows that the stream flows into a drainage swale, which eventually flows into Lake Ditch. UNT 12 to Lake Ditch exhibited a downstream OHWM characteristics of 2.6 feet in width and 1.0 foot in depth. The downstream OHWM measurement was taken approximately 4.5 feet from the structure outlet. The OHWM measurement was taken outside the influence of the structure. An upstream OHWM was not taken as there was no evidence of a stream on the east side of SR 42 and subsequently UNT 12 to Lake Ditch begins at the structure outlet of Unassigned Structure 5.

UNT 12 to Lake Ditch exhibited poor quality due to urban runoff, lack of instream cover, and an absence of riffles and pools, however the stream displayed overhanging vegetation. The substrate is primarily silt and cobble. UNT 12 to Lake Ditch flows into Lake Ditch which then flows into Mill Creek, which flows into Eel River, which flows into the White River. Since UNT 12 to Lake Ditch contributes intermittent surface water flow to the White River, a TNW, UNT 12 to Lake Ditch is likely to be considered a *Waters of the United States*

Grassy Swales:

Three grassy swales were observed within the survey area. A discussion of these grassy swales is provided below.

F8 of 95

Grassy Swale 1 is located on the south side of SR 42, and is approximately 0.09 mile west of Homer Bray Road. The grassy swale did not exhibit OHWM characteristics or a defined bed and bank. Drainage from Wetland A flows under SR 42 via Unassigned Structure 1. The grassy swale exists between two agricultural fields and is used to drain the fields directly south of the survey area. The drainage ultimately drains into Lake Ditch. This grassy swale is not mapped as a USGS blue line stream. Since Grassy Swale 1 did not exhibit OHWM characteristics or a defined bed and bank, Grassy Swale 1 is not likely to be considered a *Waters of the United States*.

Grassy Swale 2 is located on the south side of SR 42, just east of the SR 42/Bray Road intersection within a residential lawn. The grassy swale did not exhibit OHWM characteristics or a defined bed and bank. Storm water drainage from the roadway and surrounding landscape drains under SR 42 via Unassigned Structure 4 into Wetland E through the grassy swale connecting to Wetland F. This grassy swale is not mapped as a USGS blue line stream. Since Grassy Swale 2 did not OHWM characteristics or a defined bed and bank, Grassy Swale 2 is not likely to be considered a *Waters of the United States*.

Grassy Swale 3 is located on the east side of SR 42, directly east of the SR 42/Martin Smith Road intersection. The grassy swale did not exhibit OHWM characteristics or a defined bed and bank. Storm water drainage from the roadway and surrounding landscape drain under SR 42 via structure CV 042-055-49.29 into Wetland L and then into the grassy swale. The grassy swale exists between two agricultural fields and is used to drain the fields that are located on the east side of SR 42 near Martin Smith Road. The drainage flows east away from the survey area and ultimately drains into Lake Ditch. This grassy swale is mapped as a USGS blue line stream however this was not observed during the field investigation. Since Grassy Swale 3 did not OHWM characteristics or a defined bed and bank, Grassy Swale 3 is not likely to be considered a *Waters of the United States*.

Roadside Ditches (RSDs):

RSD 1 is located on the north side of SR 42, within the survey area, approximately 0.03 mile west of the SR 42/Water Street intersection. RSD 1 is a riprap lined ditch that conveys storm water drainage from the roadway and sheet flow from the surrounding landscape away from the survey area. RSD 1 did not exhibit OHWM characteristics and is not a captured stream. Therefore, this roadside ditch is not likely to be considered a *Waters of the United States*.

RSD 2 is located on the north side of SR 42, within the survey area, northwest of the SR 42/Homer Bray Road intersection. RSD 2 conveys storm water drainage from the roadway and sheet flow from the surrounding landscape away from the survey area. RSD 2 did not exhibit OHWM characteristics and is not a captured stream. Therefore, this roadside ditch is not likely to be considered a *Waters of the United States*.

RSD 3 is located on the north side of SR 42, within the survey area, beginning directly west of the SR 42/Hazelwood Road intersection. RSD 3 conveys storm water drainage from the roadway and sheet flow from the surrounding landscape to UNT 2 to Lake Ditch and ultimately to Lake Ditch. RSD 3 did not exhibit OHWM characteristics and is not a captured stream. Therefore, this roadside ditch is not likely to be considered a *Waters of the United States*.

RSD 4 is located on the south side of SR 42, within the survey area, beginning approximately 0.09 mile west of the SR 42/Hazelwood Road intersection. RSD 4 conveys storm water drainage from the roadway and sheet flow from the surrounding landscape to UNT 2 to Lake Ditch and ultimately to Lake Ditch. RSD 4 did not exhibit OHWM characteristics and is not a captured stream. Therefore, this roadside ditch is not likely to be considered a *Waters of the United States*.

RSD 5 is located on the north side of SR 42, within the survey area, beginning approximately 0.14 mile west of the SR 42/Hazelwood Road intersection. RSD 5 conveys storm water drainage from the roadway and sheet flow from the surrounding landscape to UNT 2 to Lake Ditch and ultimately to Lake Ditch. RSD 5 did not exhibit OHWM characteristics and is not a captured stream Therefore, this roadside ditch is not likely to be considered a *Waters of the United States*.

F9 of 95

RSD 6 is located on the south side of SR 42, within the survey area, beginning approximately 0.16 mile west of the SR 42/Hazelwood Road intersection. RSD 6 conveys storm water drainage from the roadway and sheet flow from the surrounding area to UNT 2 to Lake Ditch. RSD 6 did not exhibit OHWM characteristics and is not a captured stream. Therefore, this roadside ditch is not likely to be considered a *Waters of the United States*.

RSD 7 is located on the south side of SR 42, within the survey area, directly west of the SR 42/Hall Road intersection. RSD 7 conveys storm water drainage from the roadway and sheet flow from the surrounding landscape to UNT 4 to Lake Ditch. RSD 7 did not exhibit OHWM characteristics and is not a captured stream. Therefore, this roadside ditch is not likely to be considered a *Waters of the United States*.

RSD 8 is located on the east side of Shupe Road, within the survey area, directly north of the SR 42. RSD 8 conveys storm water drainage from the roadway and sheet flow from the surrounding landscape into Wetland D2. RSD 8 did not exhibit OHWM characteristics and is not a captured stream. Therefore, this roadside ditch is not likely to be considered a *Waters of the United States*.

RSD 9 is located on the east side of SR 42, within the survey area, directly northwest of the SR 42/Martin Smith Road intersection. RSD 9 conveys storm water drainage from the roadway and sheet flow from the surrounding landscape via structure CV 042-055-49.29 under SR 42 into Wetland L and Grassy Swale 3. RSD 9 did not exhibit OHWM characteristics and is not a captured stream. Therefore, this roadside ditch is not likely to be considered a *Waters of the United States*.

RSD 10 is located on the north side of SR 42 (north of UNT 8 to Lake Ditch), within the survey area, approximately 0.38 mile east for the Measel Road/SR 42 intersection. RSD 10 conveys storm water drainage and sheet flow from the surrounding landscape via structure CV 042-055-47.90 to UNT 8 to Lake Ditch. RSD 10 did not exhibit OHWM characteristics and is not a captured stream. Therefore, this roadside ditch is not likely to be considered a *Waters of the United States*.

RSD 11 is located on the south side of SR 42, within the survey area, approximately 0.12 mile west from the Measel Road/SR 42 intersection. RSD 11 conveys storm water drainage from the roadway and sheet flow from the surrounding landscape away from a residential property which dissipates into agricultural fields. RSD 11 did not exhibit OHWM characteristics and is not a captured stream. Therefore, this roadside ditch is unlikely to be considered a *Waters of the United States*.

RSD 12 is located on the north side of SR 42, within the survey area, 0.30 mile west of the Little Point Road/SR 42 intersection and connects Wetland U with Wetland W. RSD 12 is partially a riprap lined ditch that conveys storm water drainage from the roadway and sheet flow from the surrounding landscape and then extends into Wetland W. RSD 12 exits the survey area northwest of SR 42. Structure CV 042-055-46.13 provides flow from RSD 13 to RSD 12 and Wetland W. RSD 12 did not exhibit OHWM characteristics and is not a captured stream. Therefore, this roadside ditch is unlikely to be considered a *Waters of the United States*.

RSD 13 is located on the south side of SR 42, within the survey area, 0.32 mile west of the Little Point Road/SR 42 intersection. RSD 13 conveys storm water drainage and sheet flow from the surrounding landscape under SR 42 via structure CV 042-055-46.13 into RSD 12 which flows out of the survey area in a northwest direction. RSD 13 did not exhibit OHWM characteristics and is not a captured stream. Therefore, this roadside ditch is unlikely to be considered a *Waters of the United States*.

RSD 14 is located on the west side of SR 42, within the survey area, 0.21 mile east of the Belle Union Road/SR 42 intersection. RSD 14 conveys storm water drainage and sheet flow from the surrounding landscape away from the survey area. RSD 14 did not exhibit OHWM characteristics and is not a captured stream. Therefore, this roadside ditch is unlikely to be considered a *Waters of the United States*.

RSD 15 is located on the west side of SR 42, within the survey area, 0.22 mile south of the Belle Union Road/SR 42 intersection. RSD 15 conveys storm water drainage and sheet flow from the surrounding landscape away from

F10 of 95

the survey area into Lake Ditch. RSD 15 did not exhibit OHWM characteristics and is not a captured stream. Therefore, this roadside ditch is unlikely to be considered a *Waters of the United States*.

RSD 16 is located directly northwest of Lake Ditch, approximately 0.24 mile northwest/west of the CR 800/SR 42 intersection. RSD 16 conveys storm water drainage and sheet flow from the surrounding landscape to Lake Ditch. RSD 16 did not exhibit OHWM characteristics and is not a captured stream. Therefore, this roadside ditch is unlikely to be considered a *Waters of the United States*.

RSD 17 is located directly northwest of Lake Ditch, approximately 0.24 mile northwest/west of the CR 800/ SR 42 intersection. RSD 17 conveys storm water drainage and sheet flow from the surrounding landscape to Lake Ditch. RSD 17 did not exhibit OHWM characteristics and is not a captured stream. Therefore, this roadside ditch is unlikely to be considered a *Waters of the United States*.

RSD 18 is located directly southeast of Lake Ditch, on the south side of SR 42, approximately 0.20 mile northwest/west of the CR 800/ SR 42 intersection. RSD 18 conveys storm water drainage and sheet flow from the surrounding landscape to Lake Ditch. RSD 18 did not exhibit OHWM characteristics and is not a captured stream. Therefore, this roadside ditch is unlikely to be considered a *Waters of the United States*.

RSD 19 is located directly southeast of Lake Ditch, on the north side of SR 42, approximately 0.22 mile northwest of the CR 800/SR 42 intersection. RSD 19 conveys storm water drainage and sheet flow from the surrounding landscape to Lake Ditch. RSD 19 did not exhibit OHWM characteristics and is not a captured stream. Therefore, this roadside ditch is unlikely to be considered a *Waters of the United States*.

RSD 20 is located directly northwest of UNT 10 to Lake Ditch at its first crossing along SR 42, approximately 0.04 mile west of the CR 800/SR 42 intersection. RSD 20 conveys storm water drainage and sheet flow from the surrounding landscape to UNT 10 to Lake Ditch and under SR 42 via structure 042-55-07613. RSD 20 did not exhibit OHWM characteristics and is not a captured stream. Therefore, this roadside ditch is unlikely to be considered a *Waters of the United States*.

RSD 21 is located directly northeast of UNT 10 to Lake Ditch at its first crossing along SR 42, approximately 0.01 mile west of the CR 800/SR 42 intersection. RSD 21 conveys storm water drainage and sheet flow from the surrounding landscape to UNT 10 to Lake Ditch and under SR 42 via structure 042-55-07613. RSD 21 did not exhibit OHWM characteristics and is not a captured stream. Therefore, this roadside ditch is unlikely to be considered a *Waters of the United States*.

RSD 22 is located directly southwest of UNT 10 to Lake Ditch at its first crossing along SR 42, approximately, 0.04 mile west of the CR 800/SR 42 intersection. RSD 22 conveys storm water drainage and sheet flow from the surrounding landscape to UNT 10 to Lake Ditch and under SR 42 via structure 042-55-07613. RSD 22 did not exhibit OHWM characteristics and is not a captured stream. Therefore, this roadside ditch is unlikely to be considered a *Waters of the United States*.

RSD 23 is located southeast of UNT 10 at its first crossing along SR 42, approximately 0.01 mile east of the CR 800/SR 42 intersection. RSD 23 conveys storm water drainage and sheet flow from the surrounding landscape to UNT 10 to Lake Ditch and under SR 42 via structure 042-55-07613. RSD 23 did not exhibit OHWM characteristics and is not a captured stream. Therefore, this roadside ditch is unlikely to be considered a *Waters of the United States*.

Wetlands:

Wetland A is a palustrine emergent wetland (PEM) and has developed in a low-lying roadside depression located on the north side of SR 42, directly west of Homer Bray Road. Wetland A has a length of approximately 3,750 linear feet (0.85 acre). Wetland A exhibited poor quality due to lack of biodiversity and frequent disturbance from the roadway. Wetland A does not abut a *Waters of the United States* and is not inundated by flooding in a typical year; therefore, Wetland A would not likely be considered a *Waters of the United States*. However, Wetland A

F11 of 95

would likely fall under the jurisdiction of IDEM as a Class 1 Waters of the State. Data points A1 through A22 were taken to determine the boundaries of Wetland A. A discussion of these data points is provided below.

Data point A1 exhibited all three criteria to be considered within a wetland. The dominant vegetation observed at data point A1 was hybrid cattail (*Typha x glauca*), an obligate (OBL) plant. This data point exhibited one hydric soil indicator (Depleted Matrix F3). Additionally, this data point exhibited three primary wetland hydrology indicators (Surface Water A1, High Water Table A2, Saturation A3).

Data point A2 did not exhibit all three criteria to be considered within a wetland. The dominant vegetation observed at data point A2 was smooth brome (*Bromus inermis*) and tall fescue (*Schedonorus arundinaceus*), both of which are facultative upland (FACU) plants. This data point did not exhibit any hydric soil or wetland hydrology indicators.

Data point A3 exhibited all three criteria to be considered within a wetland. The dominant vegetation observed at data point A3 was rice cutgrass (*Leersia oryzoides*), which is an OBL plant. This data point exhibited one hydric soil indicator (Depleted Matrix F3). Additionally, this data point exhibited three primary wetland hydrology indicators (Surface Water A1, High Water Table A2, Saturation A3).

Data point A4 did not exhibit all three criteria to be considered within a wetland. The dominant vegetation observed at data point A4 was smooth brome (*Bromus inermis*) and tall fescue (*Schedonorus arundinaceus*), both of which are FACU plants. This data point did not exhibit any hydric soil or wetland hydrology indicators.

Data point A5 exhibited all three criteria to be considered within a wetland. The dominant vegetation observed at data point A5 was riverbank tussock sedge (*Carex emoryi*), which is an OBL plant. This data point exhibited one hydric soil indicator (Depleted Matrix F3). Additionally, this data point exhibited three primary wetland hydrology indicators (Surface Water A1, High Water Table A2, Saturation A3).

Data point A6 did not exhibit all three criteria to be considered a wetland. The dominant vegetation observed at data point A6 was smooth brome (*Bromus inermis*) and tall fescue (*Schedonorus arundinaceus*), both of which are FACU. This data point did not exhibit hydric soil or wetland hydrology indicators.

Data point A7 exhibited all three criteria to be considered within a wetland. The dominant vegetation observed at data point A7 was riverbank tussock sedge (*Carex emoryi*), which is an OBL plant. This data point exhibited one hydric soil indicator (Depleted Matrix F3). Additionally, this data point exhibited three primary wetland hydrology indicators (Surface Water A1, High Water Table A2, Saturation A3).

Data point A8 did not exhibit all three criteria to be considered within a wetland. The dominant vegetation observed at data point A8 was smooth brome (*Bromus inermis*), a FACU plant. This data point did not exhibit hydric soil or wetland hydrology indicators.

Data point A9 exhibited all three criteria to be considered within a wetland. The dominant vegetation observed at data point A9 was riverbank tussock sedge (*Carex emoryi*), which is an OBL plant. This data point exhibited one hydric soil indicator (Depleted Matrix F3). Additionally, this data point exhibited three primary wetland hydrology indicators (Surface Water A1, High Water Table A2, Saturation A3) and one secondary wetland hydrology indicator (Geomorphic Position D2).

Data point A10 did not exhibit all three criteria to be considered within a wetland. The dominant vegetation observed at data point A10 was smooth brome (*Bromus inermis*), a FACU plant. This data point did not exhibit hydric soil or wetland hydrology indicators.

Data point A11 exhibited all three criteria to be considered within a wetland. The dominant vegetation observed at data point A11 was reed canary grass (*Phalaris arundinacea*) and narrowleaf cattail (*Typha angustifolia*). Reed canary grass (*Phalaris arundinacea*) is a facultative wetland (FACW) plant, while narrowleaf cattail (*Typha*

F12 of 95

angustifolia) is an OBL plant. This data point exhibited one hydric soil indicator (Depleted Matrix F3). Additionally, this data point exhibited three primary wetland hydrology indicators (Surface Water A1, High Water Table A2, Drift Deposits B3) and one secondary hydrology indicator (Geomorphic Position D2).

Data point A12 did not exhibit all three criteria to be considered within a wetland. The dominant vegetation observed at data point A12 was smooth brome (*Bromus inermis*), a FACU plant. This data point did not exhibit hydric soil or wetland hydrology indicators.

Data point A13 exhibited all three criteria to be considered within a wetland. The dominant vegetation observed at data point A13 was rice cutgrass (*Leersia orzoides*) and reed canary grass (*Phalaris arundinacea*). Rice cutgrass (*Leersia oryzoides*) is an OBL plant while reed canary grass (*Phalaris arundinacea*) is a FACW plant. This data point exhibited one hydric soil indicator (Depleted Matrix F3). Additionally, this data point exhibited three primary wetland hydrology indicators (Surface Water A1, High Water Table A2, Saturation A3) and one secondary wetland hydrology indicator (Geomorphic Position D2).

Data point A14 did not exhibit all three criteria to be considered within a wetland. The dominant vegetation observed at data point A14 was tall fescue (*Schedonorus arundinaceus*), a FACU plant. This data point did not exhibit hydric soil or wetland hydrology indicators.

Data point A15 exhibited all three criteria to be considered within a wetland. The dominant vegetation observed at data point A15 was reed canary grass (*Phalaris arundinacea*), a FACW plant. This data point exhibited one hydric soil indicator (Depleted Matrix F3). Additionally, this data point exhibited three primary wetland hydrology indicators (Surface Water A1, High Water Table A2, Saturation A3) and one secondary wetland indicator (Geomorphic Position D2).

Data point A16 did not exhibit all three criteria to be considered within a wetland. The dominant vegetation observed at data point A16 was Canada thistle (*Cirsium arvense*), a FACU plant. This data point did not exhibit hydric soil or wetland hydrology indicators.

Data point A17 exhibited all three criteria to be considered within a wetland. The dominant vegetation observed at data point A17 was riverbank tussock sedge (*Carex emoryi*), which is an OBL plant. This data point exhibited one hydric soil indicator (Depleted Matrix F3). Additionally, this data point exhibited three primary wetland hydrology indicators (Surface Water A1, High Water Table A2, Saturation A3).

Data point A18 did not exhibit all three criteria to be considered within a wetland. The dominant vegetation observed at data point A18 was smooth brome (*Bromus inermis*), a FACU plant. This data point did not exhibit hydric soil or wetland hydrology indicators.

Data point A19 exhibited all three criteria to be considered within a wetland. The dominant vegetation observed at data point A19 was reed canary grass (*Phalaris arundinacea*), a FACW plant. This data point exhibited one hydric soil indicator (Depleted Matrix F3). Additionally, this data point exhibited three primary wetland hydrology indicators (Surface Water A1, High Water Table A2, Saturation A3).

Data point A20 did not exhibit all three criteria to be considered within a wetland. No vegetation was observed at data point A20. This data point did not exhibit hydric soil or wetland hydrology indicators.

Data point A21 exhibited all three criteria to be considered within a wetland. The dominant vegetation observed at data point A21 was reed canary grass (*Phalaris arundinacea*), a FACW plant. This data point exhibited one hydric soil indicator (Depleted Matrix F3). Additionally, this data point exhibited three primary wetland hydrology indicators (Surface Water A1, High Water Table A2, Saturation A3).

F13 of 95

Data point A22 did not exhibit all three criteria to be considered within a wetland. The dominant vegetation observed at data point A22 was corn (*Zea mays*) an upland (UPL) plant. This data point did not exhibit hydric soil or wetland hydrology indicators.

Wetland B is a PEM wetland that is located south of SR 42, just west of Lake Ditch Road. Wetland B has a length of approximately 60 linear feet (0.007 acre). Wetland B exhibited poor quality due to lack of biodiversity and frequent disturbance from the roadway. Wetland B does not abut a *Waters of the United States* and is not inundated by flooding in a typical year; therefore, Wetland B would not likely be considered a *Waters of the United States*. However, Wetland B would likely fall under the jurisdiction of IDEM as a Class 1 Waters of the State. Data points B1 through B2 were taken to determine the boundaries of Wetland B. A discussion of these data points is provided below.

Data point B1 exhibited all three criteria to be considered within a wetland. The dominant vegetation observed at data point B1 was riverbank tussock sedge (*Carex emoryi*), an OBL plant. This data point exhibited one hydric soil indicator (Depleted Matrix F3). Additionally, this data point exhibited two primary wetland hydrology indicators (High Water Table A2, Saturation A3).

Data point B2 did not exhibit all three criteria to be considered within a wetland. The dominant vegetation observed at data point B2 was tall fescue (*Schedonorus arundinaceus*), a FACU plant. This data point did not exhibit hydric soil or wetland hydrology indicators.

Wetland C is a PEM wetland that is located on the south side of SR 42, approximately 300 feet east of Johnson Road. Wetland C has a length of approximately 105 linear feet (0.028 acre). Wetland C exhibited poor quality due to lack of biodiversity and frequent disturbance from livestock. Wetland C does not abut a *Waters of the United States* and is not inundated by flooding in a typical year; therefore, Wetland C would not likely be considered a *Waters of the United States*. However, Wetland C would likely fall under the jurisdiction of IDEM as a Class 1 Waters of the State. Data points C1 and C2 were taken to determine the boundaries of Wetland C. A discussion of these data points is provided below.

Data point C1 exhibited all three criteria to be considered within a wetland. No vegetation was observed at data point C1. The vegetation was absent due to seasonal inundation and livestock disturbance. This data point exhibited one hydric soil indicator (Depleted Matrix F3). Additionally, this data point exhibited two secondary wetland hydrology indicators (Surface Soil Cracks B6, Stunted or Stressed Plants D1).

Data point C2 did not exhibit all three criteria to be considered within a wetland. The dominant vegetation observed at data point C2 was tall fescue (*Schedonorus arundinaceus*), a FACU plant. This data point did not exhibit hydric soil or wetland hydrology indicators.

Wetland D1 and D2 are both PEM wetlands that are located on the north side of SR 42, west of Shupe Road. Wetland D1 has a length of approximately 107 linear feet (0.038 acre) and Wetland D2 has a length of approximately 202 linear feet (0.067 acre). Wetland D1 and D2 both exhibited poor quality due to lack of biodiversity and frequent disturbance from the roadway. UNT 6 to Lake Ditch directly abuts Wetland D1 which is hydrologically connected via Unassigned Structure 3 to Wetland D2. UNT 7 to Lake Ditch ultimately drains into Lake Ditch. As discussed previously in the streams section, Lake Ditch contributes overland intermittent flow to the White River, a TNW. Since Wetland D1 and D2 abut a likely *Waters of the United States*, Wetland D1 and D2 are likely to be considered a *Waters of the United States*. Data points D1 and D2 were taken to determine the boundaries of Wetland D1 and given the proximity and connectivity of Wetland D2 a separate data point was not collected, however the vegetation observed was identical. A discussion of these data points is provided below.

Data point D1 exhibited all three criteria to be considered within a wetland. The dominant vegetation observed at data point D1 was reed canary grass (*Phalaris arundinacea*), a FACW plant. This data point exhibited one hydric soil indicator (Depleted Matrix F3). This data point also exhibited two primary wetland hydrology indicators (High Water Table A2, Saturation A3).

F14 of 95

Data point D2 did not exhibit all three criteria to be considered within a wetland. The dominant vegetation observed at data point D2 was tall fescue (*Schedonorus arundinaceus*), a FACU plant. This data point did not exhibit hydric soil or wetland hydrology.

Wetland E is a PEM wetland that is located on the south side of SR 42, just east of Bray Road. Wetland E has a length of approximately 430 linear feet (0.071 acre). Wetland E was observed within a residential maintained lawn, which due to modifications and the addition of a driveway, is connected to Wetland F via Grassy Swale 2. Wetland E exhibited poor quality due to lack of biodiversity and frequent disturbance from the roadway. Wetland E does not abut a *Waters of the United States* and is not inundated by flooding in a typical year; therefore, Wetland E would not likely be considered a *Waters of the United States*. However, Wetland E would likely fall under the jurisdiction of IDEM as a Class 1 Waters of the State. Data points E1 – E3 were taken to determine the boundaries of Wetland E. A discussion of these data points is provided below.

Data point E1 exhibited all three criteria to be considered within a wetland. The dominant vegetation observed at data point E1 was Kentucky bluegrass (*Poa pratensis*) which is a FAC plant. This data point exhibited two hydric soil indicators (Depleted Matrix F3, Redox Dark Surface F6). Additionally, this data point exhibited two primary wetland hydrology indicators (Saturation A3, Sparsely Vegetated Concave Surface B8) and two secondary wetland hydrology indicators (Stunted or Stressed Plants D1, Geomorphic position D2).

Data point E2 did not exhibit all three criteria to be considered within a wetland. The dominant vegetation observed at data point E2 was Kentucky bluegrass (*Poa pratensis*) and white clover (*Trifoliun repens*). Kentucky bluegrass (*Poa pratensis*) is a FAC plant, while white clover (*Trifolium repens*) is a FACU plant. This data point did not exhibit hydric soil or wetland hydrology indicators.

Data point E3 did not exhibit all three criteria to be considered within a wetland. The dominant vegetation observed at data point E3 was Kentucky bluegrass (*Poa pratensis*) and common woodland sedge (*Carex blanda*) both of which are FAC plants. This data point exhibited one hydric soil indicator (Depleted Matrix F3). This data point did not exhibit wetland hydrology indicators.

Wetland F is a PEM wetland that is located on the south side of SR 42, south of Bray Road. Wetland F has a length of approximately 119 linear feet (0.067 acre). Wetland F was observed within a residential maintained lawn, which due to modifications and the addition of a driveway, is connected to Wetland E via Grassy Swale 2. Wetland F exhibited poor quality due to lack of biodiversity and frequent disturbance from the roadway. Wetland F does not abut a *Waters of the United States* and is not inundated by flooding in a typical year; therefore, Wetland F would not likely be considered a *Waters of the United States*. However, Wetland F would likely fall under the jurisdiction of IDEM as a Class 1 Waters of the State. Data points F1 – F3 were taken to determine the boundaries of Wetland F. A discussion of these data points is provided below.

Data point F1 exhibited all three criteria to be considered within a wetland. The dominant vegetation observed at data point F1 was curly doc (*Rumex crispus*), a FAC plant. This data point exhibited one primary hydric soil indicator (Redox Dark Surface F6). Additionally, this data point exhibited two primary wetland hydrology indicators (Saturation A3, Sparsely Vegetated Concave Surface B6).

Data point F2 did not exhibit all three criteria to be considered within a wetland. The dominant vegetation observed at data point F2 was white clover (*Trifolium repens*), a FACU plant. This data point did not exhibit hydric soil or wetland hydrology indicators.

Data point F3 did not met all three criteria to be considered within a wetland. The dominant vegetation observed at data point F3 was Kentucky bluegrass (*Poa pratensis*), which is a FAC plant. This data point did not exhibit hydric soil or wetland hydrology indicators.

Wetland G is a PEM wetland that is located on the north side of SR 42, west of Bray Road. Wetland G has a length of approximately 255 linear feet (0.089 acre). Wetland G exhibited poor quality due to lack of biodiversity and

F15 of 95

frequent disturbance from the roadway. Wetland G does not abut a *Waters of the United States* and is not inundated by flooding in a typical year; therefore, Wetland G would not likely be considered a *Waters of the United States*. However, Wetland G would likely fall under the jurisdiction of IDEM as a Class 1 Waters of the State. Data points G1 and G2 were taken to determine the boundaries of Wetland G. A discussion of these data points is provided below.

Data point G1 exhibited all three criteria to be considered within a wetland. The dominant vegetation observed at data point G1 was Kentucky bluegrass (*Poa pratensis*) which is a FAC plant. One hydric soil indicator was observed at this data point (Redox Dark Surface F6). Additionally, one primary wetland hydrology indicator (Saturation A3) and two secondary wetland hydrology indicator (Soil Surface Cracks B6, FAC-Neutral Test D5).

Data point G2 did not exhibit all three criteria to be considered within a wetland. The dominant vegetation observed at data point G1 was Kentucky bluegrass (*Poa pratensis*) which is a FAC plant. This data point did not exhibit hydric soil or wetland hydrology.

Wetland H is a PEM wetland that is located on the south side of SR 42, just east of Twin Oaks Road. Wetland H has a length of approximately 60 linear feet (0.025 acre). Wetland H exhibited poor quality due to lack of biodiversity and frequent disturbance from the roadway. Wetland H does not abut a *Waters of the United States* and is not inundated by flooding in a typical year; therefore, Wetland H would not likely be considered a *Waters of the United States*. However, Wetland H would likely fall under the jurisdiction of IDEM as a Class 1 Waters of the State. Data points H1 and H2 were taken to determine the boundaries of Wetland H. A discussion of these data points is provided below.

Data point H1 exhibited all three criteria to be considered within a wetland. The dominant vegetation observed at data point H1 was creeping jenny (*Lysimachia nummularia*), a FACW plant. Two hydric soil indicators were observed at this data point (Loamy Mucky Mineral F1, Redox Dark Surface F6). Additionally, this data point exhibited four primary wetland hydrology indicators (Surface Water A1, High Water Table A2, Saturation A3, Aquatic Fauna B13).

Data point H2 did not exhibit all three criteria to be considered within a wetland. The dominant vegetation observed at data point H2 was tall fescue (*Schedonorus arundinaceus*) and creeping jenny (*Lysimachia nummularia*). Tall fescue (*Schedonorus arundinaceus*) is an FACU plant while creeping jenny (*Lysimachia nummularia*) is a FACW plant. Three hydric soil indicators were observed at this data point (Depleted Below Dark Surface A11, Depleted Matrix F3, Redox Dark Surface F6). This data point did not exhibit wetland hydrology indicators.

Wetland I is a PEM wetland that is located on the north side of SR 42, just east of Twin Oaks Road. Wetland I is directly north of Wetland H. Wetland I has a length of approximately 85 linear feet (0.085 acre). Wetland I extends north, outside of the survey area. Wetland I exhibited poor quality due to lack of biodiversity and frequent disturbance from the roadway. Wetland I does not abut a *Waters of the United States* and is not inundated by flooding in a typical year; therefore, Wetland I would not likely be considered a *Waters of the United States*. However, Wetland I would likely fall under the jurisdiction of IDEM as a Class 1 Waters of the State. Data points I1 and I2 were taken to determine the boundaries of Wetland I. A discussion of these data points is provided below.

Data point I1 exhibited all three criteria to be considered within a wetland. The dominant vegetation observed at data point I1 was barnyard grass (*Echinochloa crus-galli*), a FACW plant. This data point exhibited one hydric soil indicator (Redox Dark Surface F6). Additionally, this data point exhibited one primary wetland hydrology indicator (Saturation A3) and three secondary wetland hydrology indicators (Surface Soil Cracks B6, Saturation Visible on Aerial Imagery C9, Stunted or Stressed Plants D1).

Data point I2 did not exhibit all three criteria to be considered within a wetland. The dominant vegetation observed at data point I2 was tall fescue (*Schedonorus arundinaceus*), a FACU plant. This data point did not exhibit hydric soil. One secondary wetland hydrology indicator was observed (Geomorphic Position D2).

F16 of 95

Wetland J is a PEM wetland that is located on the north side of SR 42, 0.19 mile west of Twin Oaks Road. Wetland J has a length of approximately 200 linear feet (0.239 acre). Wetland J exhibited poor quality due to lack of biodiversity and frequent disturbance from the roadway. Wetland J extends north outside of the survey area. Wetland J does not abut a *Waters of the United States* and is not inundated by flooding in a typical year; therefore, Wetland J would not likely be considered a *Waters of the United States*. However, Wetland J would likely fall under the jurisdiction of IDEM as a Class 1 Waters of the State. Data points J1 and J2 were taken to determine the boundaries of Wetland J. A discussion of these data points is provided below.

Data point J1 exhibited all three criteria to be considered within a wetland. The dominant vegetation observed at data point 11 was troublesome sedge (*Carex molesta*) and Short's sedge (*Carex shortiana*). Troublesome sedge (*Carex molesta*) is a FAC plant, while short's sedge (*Carex shortiana*) is a FACW plant. This data point exhibited one hydric soil indicator (Redox Dark Surface F6). Additionally, this data point exhibited three primary wetland hydrology indicators (Saturation A3, Sediment Deposits B2, Sparsely Vegetated Concave Surface B8).

Data point J2 did not exhibit all three criteria to be considered within a wetland. The dominant vegetation observed at data point J2 was smooth brome (*Bromus inermis*) and rice cutgrass (*Leersia oryzoides*). Smooth brome (*Bromus inermis*) is a FACU plant while rice cutgrass (*Leersia oryzoides*) is an OBL plant. This data point exhibited on hydric soil indicator (Redox Dark Surface F6). One secondary wetland hydrology indicator was observed (Soil Surface Cracks B6).

Wetland K is a PEM wetland that is located on the south side of SR 42, 0.19 mile west of Twin Oaks Road. Wetland K has a length of approximately 80 linear feet (0.03 acre). Wetland K exhibited poor quality due to lack of biodiversity and frequent disturbance from the roadway. Wetland K does not abut a *Waters of the United States* and is not inundated by flooding in a typical year; therefore, Wetland K would not likely be considered a *Waters of the United States*. However, Wetland K would likely fall under the jurisdiction of IDEM as a Class 1 Waters of the State. Data point K1 and K2 were taken to determine the boundaries within Wetland K. A discussion of these data points is provided below.

Data point K1 exhibited all three criteria to be considered within a wetland. The dominant vegetation observed at data point K1 was reed canary grass (*Phalaris arundinacea*), a FACW plant. This data point one hydric soil indicator (Redox Dark Surface F6). Additionally, this data point exhibited one primary wetland hydrology indicator (Saturation A3) and one secondary wetland hydrology indicator (Soil Surface Cracks B6).

Data point K2 did not exhibit all three criteria to be considered within a wetland. The dominant vegetation observed at data point K2 is Kentucky bluegrass (*Poa pratensis*), a FAC plant. This data point did not exhibit hydric soil or wetland hydrology indicators.

Wetland L is a PEM wetland that is located just east of SR 42, adjacent Martin Smith Road. Wetland L has a length of approximately 70 linear feet (0.017 acre). Wetland L exhibited poor quality due to lack of biodiversity and frequent disturbance from the roadway. Wetland L extends east, outside of the survey area. Storm water drainage from the roadway and surrounding landscape flow into Wetland L via RSD 9 and under SR 42 via structure CV 042-055-49.29. Wetland L exists within Grassy Swale 3. Wetland L does not abut a *Waters of the United States* and is not inundated by flooding in a typical year; therefore, Wetland L would not likely be considered a *Waters of the United States*. However, Wetland L would likely fall under the jurisdiction of IDEM as a Class 1 Waters of the State. Data points L1 and L2 were taken to determine the boundaries within Wetland L. A discussion of these data points is provided below.

Data point L1 exhibited all three criteria to be considered within a wetland. The dominant vegetation observed at data point L1 was reed canary grass (*Phalaris arundinacea*), a FACW plant. This data point exhibited one hydric soil indicator (Redox Dark Surface F6). Additionally, this data point exhibited one primary wetland hydrology indicator (Saturation A3).

F17 of 95

Data point L2 did not exhibit all three criteria to be considered within a wetland. The dominant vegetation observed at data point L2 was corn (*Zea mays*), which is an upland (UPL) plant. This data point did not exhibit hydric soil or wetland hydrology indicators.

Wetland M is a PEM wetland that is located just west of SR 42, 0.18 mile south of Martin Smith Road. Wetland M has a length of 70 linear feet (0.020 acre). Wetland M extends west beyond the survey area. Wetland M exhibited poor quality due to lack of biodiversity and frequent disturbance from the roadway. Wetland M does not abut a Waters of the United States and is not inundated by flooding in a typical year; therefore, Wetland M would not likely be considered a Waters of the United States. However, Wetland M would likely fall under the jurisdiction of IDEM as a Class 1 Waters of the State. Data points M1 and M2 were taken to determine the boundaries of Wetland M. A discussion of these data points is provided below.

Data point M1 exhibited all three criteria to be considered within a wetland. The dominant vegetation observed at data point M1 was reed canary grass (*Phalaris arundinacea*), a FACW plant. This data point exhibited one hydric soil indicator (Redox Dark Surface F6). Additionally, this data point exhibited one primary wetland hydrology indicator (Saturation A3).

Data point M2 did not exhibit all three criteria to be considered within a wetland. The dominant vegetation observed at data point M2 was tall fescue (*Schedonorus arundinaceus*), a FACU plant. This data point did not exhibit hydric soil or wetland hydrology indicator.

Wetland N is a PEM wetland that is located on the west side of SR 42, 0.20 mile south of Martin Smith Road. Wetland N has a length of 45 linear feet (0.006acre). Wetland N exhibited poor quality due to lack of biodiversity and frequent disturbance from the roadway. Wetland N does not abut a *Waters of the United States* and is not inundated by flooding in a typical year; therefore, Wetland N would not likely be considered a *Waters of the United States*. However, Wetland N would likely fall under the jurisdiction of IDEM as a Class 1 Waters of the State. Data points N1 and N2 were taken to determine the boundaries of Wetland N. A discussion of these data points is provided below.

Data point N1 exhibited all three criteria to be considered within a wetland. The dominant vegetation observed at data point N1 was reed canary grass (*Phalaris arundinacea*), a FACW plant. One hydric soil indicator was observed at this data point (Redox Dark Surface F6). Additionally, one primary wetland hydrology indicator was observed (Saturation A3).

Data point N2 did not exhibit all three criteria to be considered within a wetland. The dominant vegetation observed at data point N2 was tall fescue (*Schedonorus arundinaceus*), a FACU plant. No hydric soil or wetland hydrology indicators were observed at this data point.

Wetland O is a PEM wetland that is located on the west side of SR 42, 0.22 mile south of Martin Smith Road. Wetland O has a length of 1550 linear feet (0.292 acre). Wetland O exhibited poor quality due to lack of biodiversity and frequent disturbance from the roadway. Wetland O does not abut a *Waters of the United States* and is not inundated by flooding in a typical year; therefore, Wetland O would not likely be considered a *Waters of the United States*. However, Wetland O would likely fall under the jurisdiction of IDEM as a Class 1 Waters of the State. Data points O1 – O6 were taken to determine the boundaries of Wetland O. A discussion of these data points is provided below.

Data point O1 exhibited all three criteria to be considered within a wetland. The dominant vegetation observed at data point O1 was reed canary grass (*Phalaris arundinacea*), a FACW plant. One hydric soil indicator (Redox Dark Surface F6) was observed at this data point. Additionally, two primary wetland hydrology indicators (High Water Table A2, Saturation A3) and one secondary wetland hydrology indicator (FAC-Neutral Test D5) were observed.

F18 of 95

Data point O2 did not exhibit all three criteria to be considered within a wetland. The dominant vegetation observed at data point O2 was tall fescue (*Schedonorus arundinaceus*), a FACU plant. This data point did not exhibit hydric soil or wetland hydrology indicators.

Data point O3 exhibited all three criteria to be considered within a wetland. The dominant vegetation observed at data point O3 was reed canary grass (*Phalaris arundinaceus*), a FACW plant. One hydric soil indicator was observed at this data point (Redox Dark Surface F6). Additionally, two primary wetland hydrology indicators were observed at this data point (High Water Table A2, Saturation A3).

Data point O4 did not exhibit all three criteria to be considered within a wetland. The dominant vegetation observed at data point O4 was tall fescue (*Schedonorus arundinaceus*), a FACU plant. This data point did not exhibit any hydric soil or wetland hydrology indicators.

Data point O5 exhibited all three criteria to be considered within a wetland. The dominant vegetation observed at data point O5 was reed canary grass (*Phalaris arundinacea*) which is a FACW plant. One hydric soil indicator (Redox Dark Surface F6) was observed at this data point. Additionally, one primary wetland hydrology indicator was observed (Saturation A3).

Data point O6 did not exhibit all three criteria to be considered within a wetland. The dominant vegetation observed at data point O6 was tall fescue (*Schedonorus arundinaceus*), a FACU plant. This data point did not exhibit hydric soil or wetland hydrology indicators.

Wetland P is a PEM wetland that is located on the east side of SR 42, north of Evans Road and northwest of Wheeler Road. Wetland P has a length of 425 linear feet (0.056 acre). Wetland P exhibited poor quality due to lack of biodiversity and frequent disturbance from the roadway. Wetland P does not abut a *Waters of the United States* and is not inundated by flooding in a typical year; therefore, Wetland P would not likely be considered a *Waters of the United States*. However, Wetland P would likely fall under the jurisdiction of IDEM as a Class 1 Waters of the State. Data points P1 – P2 were taken to determine the boundaries of Wetland P. A discussion of these data points is provided below.

Data point P1 exhibited all three criteria to be considered within a wetland. The dominant vegetation observed at data point P1 was reed canary grass (*Phalaris arundinacea*), a FACW plant. This data point also exhibited two hydric soil indicator (Depleted Matrix F3 and Redox Dark Surface F6). Additionally, this data point exhibited one primary wetland hydrology indicator (Saturation A3).

Data point P2 did not exhibit all three criteria to be considered within a wetland. The dominant vegetation observed at data point P2 was corn (*Zea mays*), an upland (UPL) plant. This data point did not exhibit hydric soil or wetland hydrology indicators.

Wetland Q is a PEM wetland that is located on the north side of SR 42, 0.51 mile west of Evans Road. Wetland Q has a length of 95 linear feet (0.01 acre). Wetland Q exhibited poor quality due to lack of biodiversity and frequent disturbance from the roadway. Wetland Q does not abut a *Waters of the United States* and is not inundated by flooding in a typical year; therefore, Wetland Q would not likely be considered a *Waters of the United States*. However, Wetland Q would likely fall under the jurisdiction of IDEM as a Class 1 Waters of the State. Data points Q1 and Q2 were taken to determine the boundaries of Wetland Q. A discussion of these data points is provided below.

Data point Q1 exhibited all three criteria to be considered within a wetland. The dominant vegetation observed at data point Q1 was narrowleaf cattail (*Typha angustifolia*), an OBL plant. This data point exhibited two hydric soil indicators (Depleted Matrix F3 and Redox Dark Surface F6). Additionally, this data point exhibited Saturation (A3) a primary wetland hydrology indicator.

Data point Q2 did not exhibit all three criteria to be considered within a wetland. The dominant vegetation observed

F19 of 95

at data point Q2 was corn (*Zea mays*) and Canada thistle (*Cirsium arvense*). Corn (*Zea mays*) is an upland (UPL) plant and Canada thistle (*Cirsium arvense*) is a FACU plant. This data point did not exhibit hydric soil or wetland hydrology indicators.

Wetland R is a PEM wetland that is located on the north side of SR 42, just west of Wetland Q. Wetland R has a length of 820 linear feet (0.064 acre). Wetland R connects to RSD 10. Wetland R exhibited poor quality due to lack of biodiversity and frequent disturbance from the roadway Wetland R does not abut a *Waters of the United States* and is not inundated by flooding in a typical year; therefore, Wetland R would not likely be considered a *Waters of the United States*. However, Wetland R would likely fall under the jurisdiction of IDEM as a Class 1 Waters of the State. Data points R1 – R3 were taken to determine the boundaries of Wetland R. A discussion of these data points is provided below.

Data point R1 exhibited all three criteria to be considered within a wetland. The dominant vegetation observed data point R1 was broadleaf cattail (*Typha latifolia*) and reed canary grass (*Phalaris arundinacea*). Broadleaf cattail (*Typha latifolia*) is an OBL plant, while reed canary grass (*Phalaris arundinacea*) is a FACW plant. This data point exhibited one hydric soil indicator (Redox Dark Surface F6). Additionally, this data point exhibited one primary wetland hydrology indicator (Saturation A3).

Data point R2 did not exhibit all three criteria to be considered within a wetland. The dominant vegetation observed at data point R2 was tall fescue (*Schedonorus arundinaceus*), a FACU plant. This data point exhibited one hydric soil indicator (Redox Dark Surface F6). This data point did not exhibit any wetland hydrology indicators.

Data point R3 exhibited all three criteria to be considered within a wetland. The dominant vegetation observed data point R3 was narrowleaf cattail (*Typha angustifolia*) and reed canary grass (*Phalaris arundinacea*). Narrowleaf cattail (*Typha angustifolia*) is an OBL plant, while reed canary grass (*Phalaris arundinacea*) is a FACW plant. This data point exhibited one hydric soil indicator (Redox Dark Surface F6). Additionally, this data point exhibited two primary wetland hydrology indicators (Saturation A3, Aquatic Fauna B13).

Wetland S is a PEM wetland that is located on the south side of SR 42, 0.18 mile west of Little Point Road. Wetland S has a length of 15 linear feet (0.01 acre). Wetland S exhibited poor quality due to lack of biodiversity and frequent disturbance from the roadway. Wetland S does not abut a *Waters of the United States* and is not inundated by flooding in a typical year; therefore, Wetland S would not likely be considered a *Waters of the United States*. However, Wetland S would likely fall under the jurisdiction of IDEM as a Class 1 Waters of the State. Data points S1 and S2 were taken to determine the boundaries of Wetland S. A discussion of these data points is provided below.

Data point S1 exhibited all three criteria to be considered within a wetland. The dominant vegetation observed at data point S1 was cat grass (*Dactylis glomerata*), slender rush (*Juncus tenuis*) and pinkweed (*Persicaria pensylvanicum*) within the herb stratum. The dominant vegetation observed within the tree stratum was green ash (*Fraxinus pennsylvanica*). Pinkweed (*Persicaria pensylvanicum*) and green ash (*Fraxinus pennsylvanica*) are both FACW plants while cat grass (*Dactylis glomerate*) is a FACU plant and slender rush (*Juncus tenuis*) is a FAC plant. This data point exhibited one hydric soil indicator (Redox Dark Surface F6). Additionally, this data point exhibited one primary wetland hydrology indicator (Saturation A3).

Data point S2 did not exhibit all three criteria to be considered within a wetland. The dominant vegetation observed at data point S2 was white clover (*Trifolium repens*) and tall fescue (*Schedonorus arundinaceus*), both of which are FACU plants. This data point did not exhibit any hydric soil or wetland hydrology indicators.

Wetland T is a PEM wetland that is located on the south side of SR 42, approximately 0.21 mile west of Little Point Road. Wetland T has a length of 275 linear feet (0.099 acre). Wetland T exhibited poor quality due to lack of biodiversity and frequent disturbance from the roadway. Wetland T does not abut a *Waters of the United States* and is not inundated by flooding in a typical year; therefore, Wetland T would not likely be considered a *Waters of the United States*. However, Wetland T would likely fall under the jurisdiction of IDEM as a Class 1 Waters of the

F20 of 95

State. Data points T1 and T2 were taken to determine the boundaries of Wetland T. A discussion of these data points is provided below.

Data point T1 exhibited all three criteria to be considered within a wetland. The dominant vegetation observed at data point T1 was reed canary grass (*Phalaris arundinacea*) and Kentucky bluegrass (*Poa pratensis*). Reed canary grass (*Phalaris arundinacea*) is a FACW plant while Kentucky bluegrass (*Poa pratensis*) is a FAC plant. This data point exhibited one hydric soil indicator (Depleted Dark Surface F7). Additionally, this data point exhibited one primary wetland hydrology indicator (Saturation A3) and two secondary wetland hydrology indicators (Surface Soil Cracks B6, Saturation Visible on Aerial Imagery C9).

Data point T2 did not exhibit all three criteria to be considered within a wetland. The dominant vegetation observed at data point T2 was tall fescue (*Schedonorus arudinaceus*) and white clover (*Trifolium repens*), both of which are FACU plants. This data point did not exhibit any hydric soil or wetland hydrology indicators.

Wetland U is a PEM wetland that is located on the north side of SR 42, approximately 0.22 mile west of Little Point Road. Wetland U has a length of 412 linear feet (0.010 acre). Wetland U exhibited poor quality due to lack of biodiversity and frequent disturbance from the roadway. Wetland U is connected to Wetland W via RSD 12, which flows outside of the survey area in a northwest direction. Wetland U does not abut a *Waters of the United States* and is not inundated by flooding in a typical year; therefore, Wetland U would not likely be considered a *Waters of the United States*. However, Wetland U would likely fall under the jurisdiction of IDEM as a Class 1 Waters of the State. Data points U1 and U2 were taken to determine the boundaries of Wetland U. A discussion of these data points is provided below.

Data point U1 exhibited all three criteria to be considered within a wetland. The dominant vegetation observed at data point U1 was narrowleaf cattail (*Typha angustifolia*) and reed canary grass (*Phalaris arundinacea*). Narrowleaf cattail (*Typha angustifolia*) is an OBL plant while reed canary grass (*Phalaris arundinacea*) is a FACW plant. One hydric soil indicator was observed at this data point (Redox Dark Surface F6). Additionally, one primary wetland hydrology indicator was observed (Saturation A3).

Data point U2 did not exhibit all three criteria to be considered within a wetland. The dominant vegetation observed at data point U2 was tall fescue (*Schedonorus arundinaceus*) and reed canary grass (*Phalaris arundinacea*). Tall fescue (*Schedonorus arundinaceus*) is a FACU plant while reed canary grass (*Phalaris arundinacea*) is a FACW plant. This data point did not exhibit any hydric soil or wetland hydrology indicators.

Wetland V is a Scrub-Shrub (SCS) wetland that is located on the south side of SR 42, approximately 0.27 mile west of Little Point Road. Wetland V has a length of approximately 95 linear feet (0.021 acre). Wetland V exhibited poor quality due to lack of biodiversity and frequent disturbance from the roadway. Wetland V does not abut a *Waters of the United States* and is not inundated by flooding in a typical year; therefore, Wetland V would not likely be considered a *Waters of the United States*. However, Wetland V would likely fall under the jurisdiction of IDEM as a Class 1 Waters of the State. Data points V1 and V2 were taken to determine the boundaries of Wetland V. A discussion of these data points is provided below.

Data point V1 exhibited all three criteria to be considered within a wetland. The dominant vegetation observed at data point V1 was eastern cottonwood (*Populus deltoides*) within the tree stratum and sandbar willow (*Salix exigua*) within the sapling/shrub stratum. The dominate vegetation within the herb stratum was narrowleaf cattail (*Typha angustifolia*) and beaked cornsalad (*Valerianella radiata*). Eastern cottonwood (*Populus deltoides*) is a FAC plant, while narrowleaf willow (*Salix exigua*) and beaked cornsalad (*Valerianella radiata*) are both FACW plants and narrowleaf cattail is a OBL plant. This data point exhibited one hydric soil indicator (Redox Dark Surface F6) however a restrictive layer of gravel was met at 12 inches. Additionally, this data point exhibited two primary wetland hydrology indicators (Saturation A3, Algal Mat or Crust B4) and one secondary wetland hydrology indicator (Surface Soil Cracks B6).

F21 of 95

Data point V2 did not exhibit all three criteria to be considered within a wetland. The dominant vegetation observed at data point V2 was Kentucky bluegrass (*Poa pratensis*), a FAC plant. This data point did not exhibit hydric soil; however, a restrictive layer of gravel was met at 15 inches. Wetland hydrology indicators were not observed at this data point.

Wetland W is a PEM wetland that is located on the north side of SR 42, approximately 0.35 mile west of Little Point Road. Wetland W has a length of approximately 190 linear feet (0.027 acre). Wetland W exhibited poor quality due to lack of biodiversity and frequent disturbance from the roadway. Wetland W is wholly contained in RSD 12. Wetland W does not abut a *Waters of the United States* and is not inundated by flooding in a typical year; therefore, Wetland W would not likely be considered a *Waters of the United States*. However, Wetland W would likely fall under the jurisdiction of IDEM as a Class 1 Waters of the State. Data points W1 and W2 were taken to determine the boundaries of Wetland W. A discussion of these data points is provided below.

Data point W1 exhibited all three criteria to be considered within a wetland. The dominant vegetation observed at data point W1 was common spikerush (*Eleocharis palustris*), spotted St. John's wort (*Hypericum punctatum*), and barnyard grass (*Echinochloa crus-galli*). Common spikerush (*Eleocharis palustris*) is an OBL plant, while spotted St. John's wort (*Hypericum punctatum*) is a FAC plant, and barnyard grass (*Echinochloa crus-galli*) is a FACW plant. This data point exhibited one hydric soil indicator (Redox Dark Surface F6). Additionally, this data point exhibited two primary wetland hydrology indicators (Saturation A3, Algal Mat or Crust B4) and one secondary wetland hydrology indicator (Surface Soil Cracks B6).

Data point W2 did not exhibit all three criteria to be considered within a wetland. The dominant vegetation observed at data point W2 was white clover (*Trifolium repens*) and tall fescue (*Schedonorus arundinaceus*), both of which are FACU plants. This data point exhibited one hydric soil indicator (Redox Dark Surface F6). This data point did not exhibit any wetland hydrology indicators.

Open Water:

No open water habitat was observed within the survey area.

F22 of 95

Table 1: Stream Summary SR 42 Roadway Reconstruction Project Des. No. 1601075 & 1701593 Morgan County, Indiana

Stream Name	Photos	Lat/Long	OHWM Width (feet)	OHWM Depth (feet)	USGS Blue- line Classification	Flow Regime	Riffles/ Pools?	Substrate	Stream Quality	Likely Water of U.S.?
UNT 1 to Lake Ditch	69,73 - 74,76 - 77	39.57883° N -86.50483° W	8.0	2.5	Intermittent	Intermittent	No	Silt	Poor	Yes
UNT 1 to Lake Ditch CV	N/A	39.57897° N -86.50484° W	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No
UNT 2 to Lake Ditch	88, 90-95	39.57926 ° N -86.52394° W	9.0	4.0	Intermittent	Intermittent	No	Silt	Poor	Yes
UNT 3 to Lake Ditch	104-107	39.57907° N -86.53593° W	5.5	1.0	None	Ephemeral	No	Silt	Poor	No
UNT 4 to Lake Ditch	109, 110 - 114	39.57949° N -86.5471° W	9.75	4.5	Perennial	Perennial	No	Silt	Poor	Yes
UNT 5 to Lake Ditch	121-125	39.57957° N -86.55779° W	11.5	3.0	Intermittent	Intermittent	No	Silt	Poor	Yes
UNT 5 to Lake Ditch CV	N/A	39.57934° N -86.55802° W	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No
UNT 6 to Lake Ditch	136, 138- 142	39.57934° N -86.57017° W	2.75	0.5	Intermittent	Intermittent	No	Silt	Poor	Yes
UNT 6 to Lake Ditch CV	N/A	39.5793° N -86.57005° W	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No
UNT 7 to Lake Ditch	225-226	39.56464° N -86.58966° W	5.5	2.75	Intermittent	Intermittent	No	Silt	Poor	Yes
UNT 7 to Lake Ditch CV	N/A	39.56482° N -86.58971° W	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No
UNT 8 to Lake Ditch	238-241	39.56467° N -86.60381° W	5.0	2.25	None	Ephemeral	No	Silt	Poor	No
UNT 9 to Lake Ditch	247-248, 251	39.56469° N -86.61782° W	6.25	2.25	Intermittent	Intermittent	No	Silt	Poor	Yes
Lake Ditch	292-295	39.54443° N -86.64574° W	40.0	7.0	Perennial	Perennial	Yes	Silt	Poor	Yes
UNT 10 to Lake Ditch (First Crossing)	303-306	39.54336° N -86.64224° W	7.75	2.0	Perennial	Perennial	Yes	Silt	Poor	Yes

SR 42 Roadway Resconstruction (Des. No. 1601075 & 1701593) Waters of U.S. Determination

Stream Name	Photos	Lat/Long	OHWM Width (feet)	OHWM Depth (feet)	USGS Blue- line Classification	Flow Regime	Riffles/ Pools?	Substrate	Stream Quality	Likely Water of U.S.?
UNT 10 (First Crossing to Lake Ditch CV	N/A	39.5432° N -86.64216° W	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No
UNT 10 to Lake Ditch (Second Crossing)	310-311	39.54151° N -86.6164° W	7.75	2.0	Intermittent	Perennial	No	Silt	Poor	Yes
UNT 10 to Lake Ditch (Second Crossing) CV	N/A	39.54146° N -86.64151° W	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No
UNT 11 to Lake Ditch	250, 315 - 317	39.52375° N -86.64131° W	5.0	1.0	Intermittent	Intermittent	No	Silt/ Cobble	Poor	Yes
UNT 11 to Lake Ditch CV	N/A	39.52375° N -86.64154° W	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No
UNT 12 to Lake Ditch	318-319	39.52211° N -86.64171° W	2.6	1.0	None	Intermittent	No	Silt/ Cobble	Average	Yes

Table 2: Wetland Summary SR 42 Roadway Reconstruction Project Des. No. 1601075 & 1701593 Morgan County, Indiana

Name	Photos	Lat/Long	Туре	Quality	Total Area (acres)	Likely Water of U.S.?
Wetland A	13,16,19,22,27-28,34- 35,38,40- 41,46,48,50,52,54,56,58- 59,62,64,65-70	39.57897° N -86.49626° W	PEM	Poor	0.85	No
Wetland B	101-103	39.57896° N -86.52658° W	PEM	Poor	0.007	No
Wetland C	116,119-120	39.57906° N -86.55355° W	PEM	Poor	0.028	No
Wetland D1	135	39.56983° N -86.56984° W	PEM	Poor	0.038	Yes
Wetland D2	129-132	39.57943° N -86.56914° W	PEM	Poor	0.067	Yes
Wetland E	143,145,147,151	39.57918° N -86.5740° W	PEM	Poor	0.067	No
Wetland F	152,154,157	39.57915° N -86.5758° W	PEM	Poor	0.071	No
Wetland G	159,163,164	39.57925° N -86.57586° W	PEM	Poor	0.089	No
Wetland H	169-171	39.57908° N -86.5788° W	PEM	Poor	0.025	No
Wetland I	167	39.57931° N -86.57896° W	PEM	Poor	0.085	No
Wetland J	179-180,182-183,188	39.57938° N -86.58454° W	PEM	Poor	0.239	No
Wetland K	185	39.57915° N -86.58481° W	PEM	Poor	0.03	No
Wetland L	193-194	39.5721° N -86.58939° W	PEM	Poor	0.017	No
Wetland M	200,203	39.56943° N -86.58977° W	PEM	Poor	0.020	No
Wetland N	203-204	39.56922° N -86.58966° W	PEM	Poor	0.006	No

F25 of 95

Name	Photos	Lat/Long	Туре	Quality	Total Area (acres)	Likely Water of U.S.?
Wetland O	208,211	39.56805° N -86.58967° W	PEM	Poor	0.292	No
Wetland P	212,220-221,224	39.56546° N -86.58952° W	PEM	Poor	0.056	No
Wetland Q	228	39.56484° N -86.59949° W	PEM	Poor	0.01	No
Wetland R	232,234,236-237	39.56485° N -86.60237° W	PEM	Poor	0.064	No
Wetland S	N/A	39.5648° N -86.63526° W	PEM	Poor	0.01	No
Wetland T	258-259,262	39.5648° N -86.63618° W	PEM	Poor	0.099	No
Wetland U	270,272-275	39.56489° N -86.63692° W	PEM	Poor	0.010	No
Wetland V	264-266	39.56468° N -86.6373° W	SCS	Poor	0.021	No
Wetland W	276-278	39.56493° N -86.63877° W	PEM	Poor	0.027	No

F26 of 95

Table 3: Waters of the State Likely Status SR 42 Roadway Reconstruction Project Des. No. 1601075 & 1701593 Morgan County, Indiana

Name	Likely Status	Notes
Α	Class 1	Located south of SR 42 and south of Wetland A.
В	Class 1	Located southwest of the SR 42 and Lake Ditch Rd intersection.
С	Class 1	Located south of SR 42, 330 ft east of Johnson Rd.
Е	Class 1	Located south of SR42, 278 ft east of Wetland F and 399 ft from Bray Rd.
F	Class 1	Located 10 ft south of the SR 42 and Bray Rd intersection.
G	Class 1	Located <10 ft northeast of the SR 42 and Bray Rd intersection and north of Wetland F.
Н	Class 1	Located south of SR 42, 373 ft east of Twin Oaks Rd.
I	Class 1	Located north of SR 42, 307 ft east of Twin Oaks Rd.
J	Class 1	Located north of SR 42, 1267 ft east of Simpson Rd. and Wellman Rd. intersection.
K	Class 1	Located south of SR 42, 1,309 ft east of Wellman Rd and 1,250 ft west of Twin Oaks Rd.
L	Class 1	Located east of the SR 42 and Martin Smith Rd intersection.
M	Class 1	Located east of SR 42 and 950 ft from Martian Smith Rd.
N	Class 1	Located east of SR 42 and 1,030 ft from Martian Smith Rd.
О	Class 1	Located east of SR 42 and 1196 ft from Martian Smith Rd.
P	Class 1	Located 34 ft. northeast of the SR 42 and Wheeler Rd. Intersection.
Q	Class 1	Located north of SR 42, 0.52 miles west of the SR 42 and Wheeler Rd. intersection.
R	Class 1	Located north of SR 42, 0.50 miles east of the SR 42 and Measle Rd. intersection.
S	Class 1	Located south of SR 42, 926 ft. east of the SR 42 and Little Points Rd. intersection.
T	Class 1	Located south of SR 42, 1,081 ft. east of the SR 42 and Little Points Rd. intersection.
U	Class 1	Located north of SR 42, 1,175 ft. east of the SR 42 and Little Points Rd. intersection.
V	Class 1	Located south of SR 42, .28 miles east of the SR 42 and Little Points Rd. intersection.
W	Class 1	Located north of SR 42, 1,825 ft from the SR 42 and Little Points Rd. intersection.

F27 of 95

Table 4: Data Point Summary SR 42 Roadway Reconstruction Project Des. No. 1601075 & 1701593 Morgan County, Indiana

Data Point	Vegetation	Soils	Hydrology	Wetland
A1	Yes	Yes	Yes	Yes
A2	No	No	No	No
A3	Yes	Yes	Yes	Yes
A4	No	No	No	No
A5	Yes	Yes	Yes	Yes
A6	No	No	No	No
A7	Yes	Yes	Yes	Yes
A8	No	No	No	No
A9	Yes	Yes	Yes	Yes
A10	No	No	No	No
A11	Yes	Yes	Yes	Yes
A12	No	No	No	No
A13	Yes	Yes	Yes	Yes
A14	No	No	No	No
A15	Yes	Yes	Yes	Yes
A16	No	No	No	No
A17	Yes	Yes	Yes	Yes
A18	No	No	No	No
A19	Yes	Yes	Yes	Yes
A20	No	No	No	No
A21	Yes	Yes	Yes	Yes
A22	No	No	No	No
B1	Yes	Yes	Yes	Yes
B2	No	No	No	No
C1	Yes	Yes	Yes	Yes
C2	No	No	No	No
D1	Yes	Yes	Yes	Yes
D2	No	No	No	No
E1	Yes	Yes	Yes	Yes
E2	No	No	No	No
E3	Yes	Yes	No	No
F1	Yes	Yes	Yes	Yes
F2	No	No	No	No
F3	Yes	No	No	No
G1	Yes	Yes	Yes	Yes
G2	Yes	No	No	No
H1	Yes	Yes	Yes	Yes
H2	No	Yes	No	No
I1	Yes	Yes	Yes	Yes
I2	No	No	No	No
J1	Yes	Yes	Yes	Yes
J2	No	Yes	No	No
K1	Yes	Yes	Yes	Yes

F28 of 95

Data Point	Vegetation	Soils	Hydrology	Wetland
K2	Yes	No	No	No
L1	Yes	Yes	Yes	Yes
L2	No	No	No	No
M1	Yes	Yes	Yes	Yes
M2	No	No	No	No
N1	Yes	Yes	Yes	Yes
N2	No	No	No	No
O1	Yes	Yes	Yes	Yes
O2	No	No	No	No
O3	Yes	Yes	Yes	Yes
O4	No	No	No	No
O5	Yes	Yes	Yes	Yes
O6	No	No	No	No
P1	Yes	Yes	Yes	Yes
P2	No	No	No	No
Q1	Yes	Yes	Yes	Yes
Q2	No	No	No	No
R1	Yes	Yes	Yes	Yes
R2	No	Yes	No	No
R3	Yes	Yes	Yes	Yes
S1	Yes	Yes	Yes	Yes
S2	No	No	No	No
T1	Yes	Yes	Yes	Yes
T2	No	No	No	No
U1	Yes	Yes	Yes	Yes
U2	No	No	No	No
V1	Yes	Yes	Yes	Yes
V2	Yes	No	No	No
W1	Yes	Yes	Yes	Yes
W2	No	Yes	No	No

Table 5: Roadside Ditches SR 42 Roadway Reconstruction Project Des. No. 1601075 & 1701593 Morgan County, Indiana

Name	Approximate Length Within Investigation Area
RSD 1	42.1 lft.
RSD 2	69.9 lft.
RSD 3	632.1 lft.
RSD 4	282.7 lft.
RSD 5	63.6 lft.
RSD 6	85.7 lft.
RSD 7	1814.7 lft.
RSD 8	98.5 lft.
RSD 9	211.94 lft
RSD 10	641.9 lft.
RSD 11	288.7 lft.
RSD 12	572.1 lft.
RSD 13	460.5 lft.
RSD 14	497.7 lft.
RSD 15	355.9 lft.
RSD 16	243.9 lft.
RSD 17	223.2 lft.
RSD 18	472.9 lft.
RSD 19	472.9 lft.
RSD 20	90.3 lft.
RSD 21	144.0 lft.
RSD 22	105.7 lft.
RSD 23	116.5 lft.

F30 of 95

Conclusions:

A field investigation was conducted on June 3, 4, 6, and September 5, 2019 by RQAW Corporation to evaluate the presence of *Waters of the United States* for the SR 42 Roadway Reconstruction Project in Morgan County, Indiana.

Field observations identified four perennial streams (UNT 4 to Lake Ditch, UNT 10 to Lake Ditch First and Second Crossing, and Lake Ditch) and eight intermittent streams (UNTs 1-2, 5-7, 9, and 11-12 to Lake Ditch). Based on their contribution of perennial or intermittent overland flow to the White River, a TNW, these streams would likely be considered *Waters of the United States*. Two wetlands (Wetlands D1 and D2) are likely *Waters of the United States*, because they are directly abutting one of the afore mentioned likely *Waters of the United States*.

A total of 22 wetlands (A-C, E-W) would likely be considered Class 1 Waters of the State and likely under the jurisdiction of IDEM. In addition, UNT 3 and 8 to Lake Ditch are not likely to be considered *Waters of the United States* as they do not contribute intermittent or perennial overland flow to a TNW.

Every effort should be taken to avoid and minimize impacts to these waterways. If impacts are necessary, then mitigation may be required. The INDOT Ecology and Waterway Permitting Section should be contacted immediately if impacts will occur. The final determination of jurisdictional waters is ultimately made by the U.S. Army Corps of Engineers. This report is our best judgement based on the guidelines set forth by the Corps.

Acknowledgement:

This waters determination has been prepared based on the best available information, interpreted in the light of the investigator's training, experience and professional judgement in conformance with the 1987 Corps of Engineers Wetlands Delineation Manual, the appropriate regional supplement, the USACE Jurisdictional Determination Form Instructional Guidebook, and other appropriate agency guidelines.

Prepared by:

Julie Evans

7

Environmental Scientist

RQAW | Environmental Department

07/10/2021

jevans@RQAW.com

Brooke Fox

Environmental Scientist

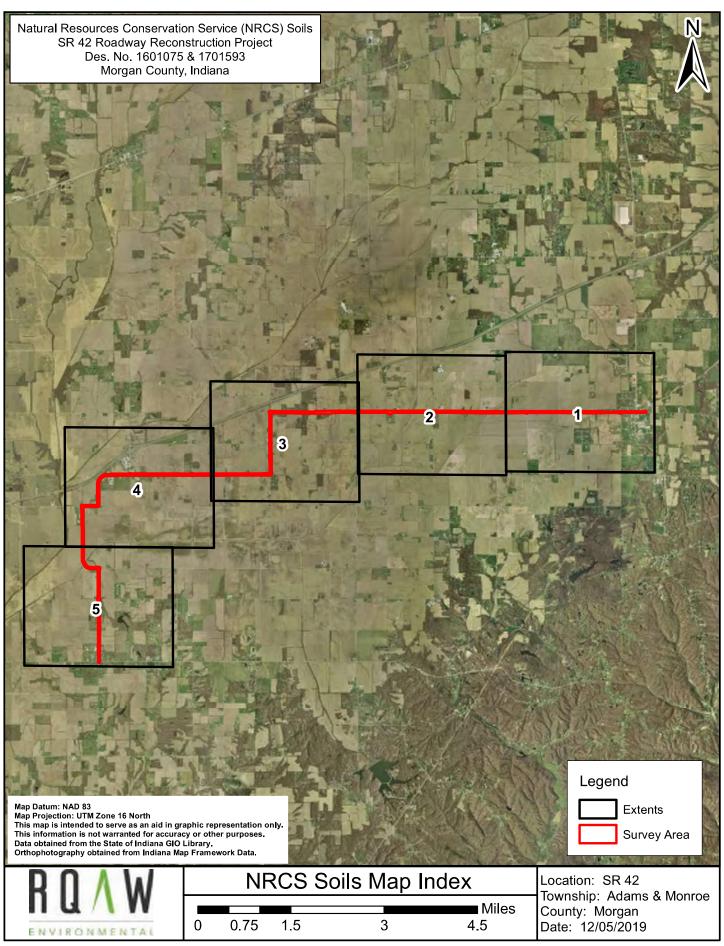
ROAW | Environmental Department

07/10/2021

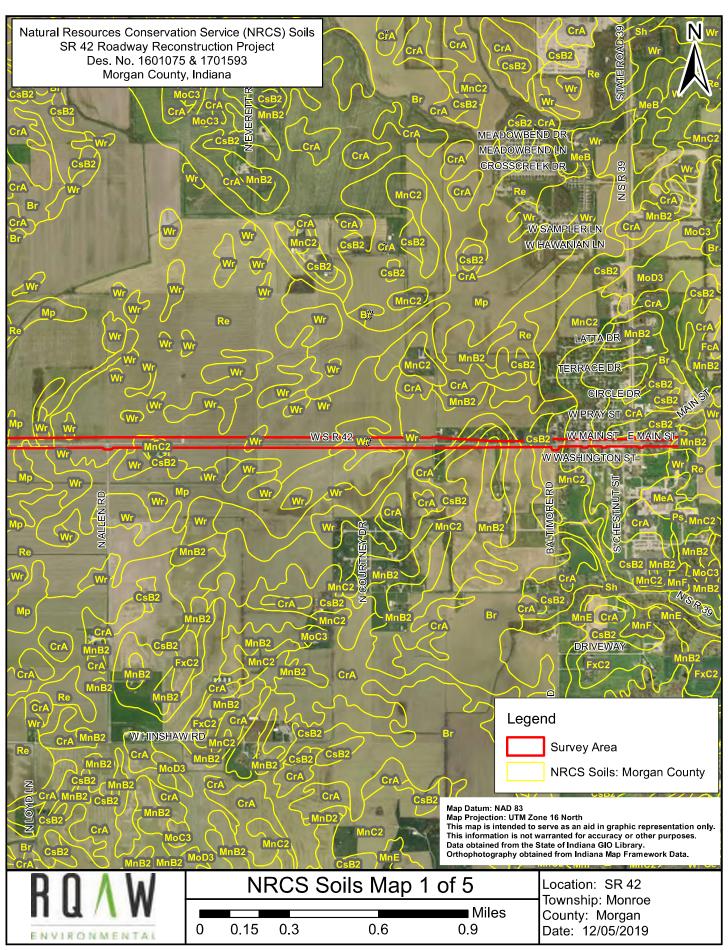
bfox@ROAW.com

3 ml M

F31 of 95

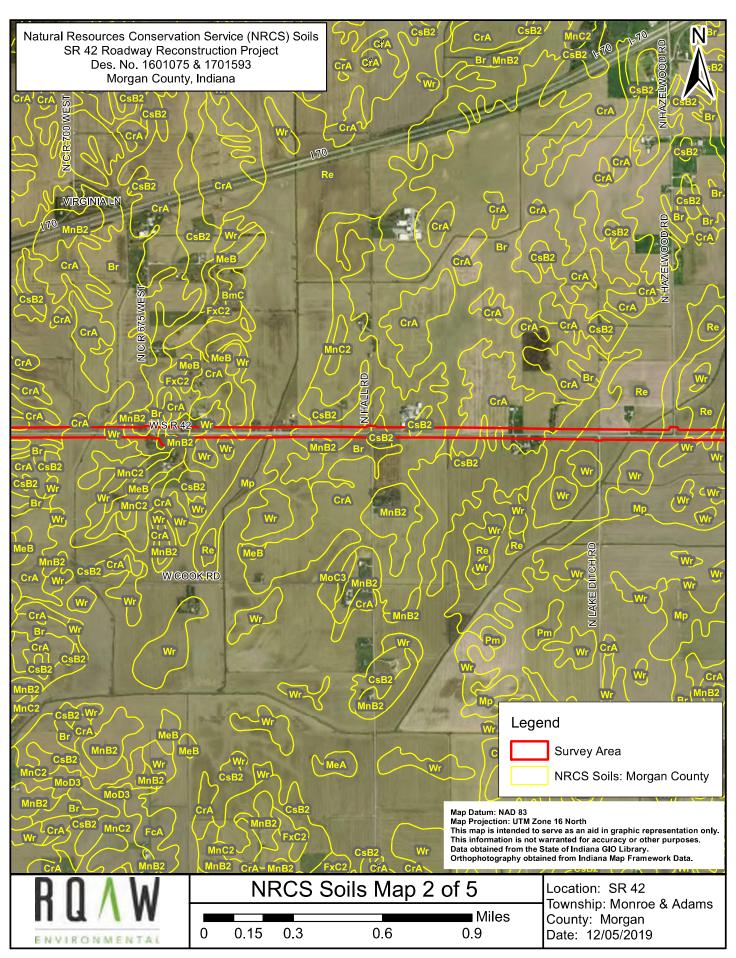


Waters of the U.S. Determination



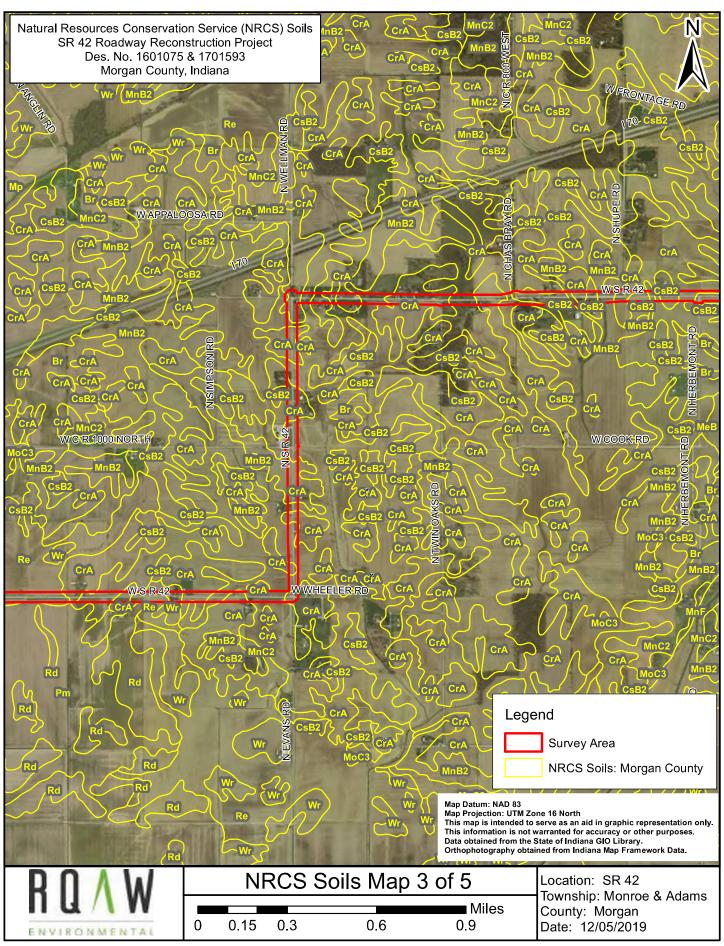
Waters of the U.S. Determination

Α8



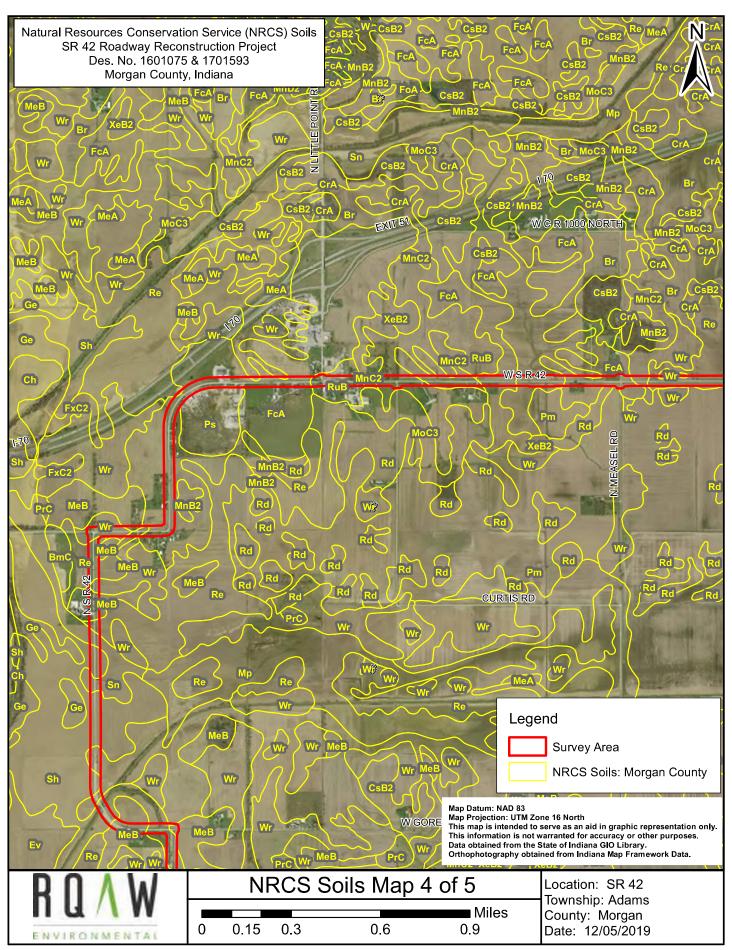
Waters of the U.S. Determination

Α9



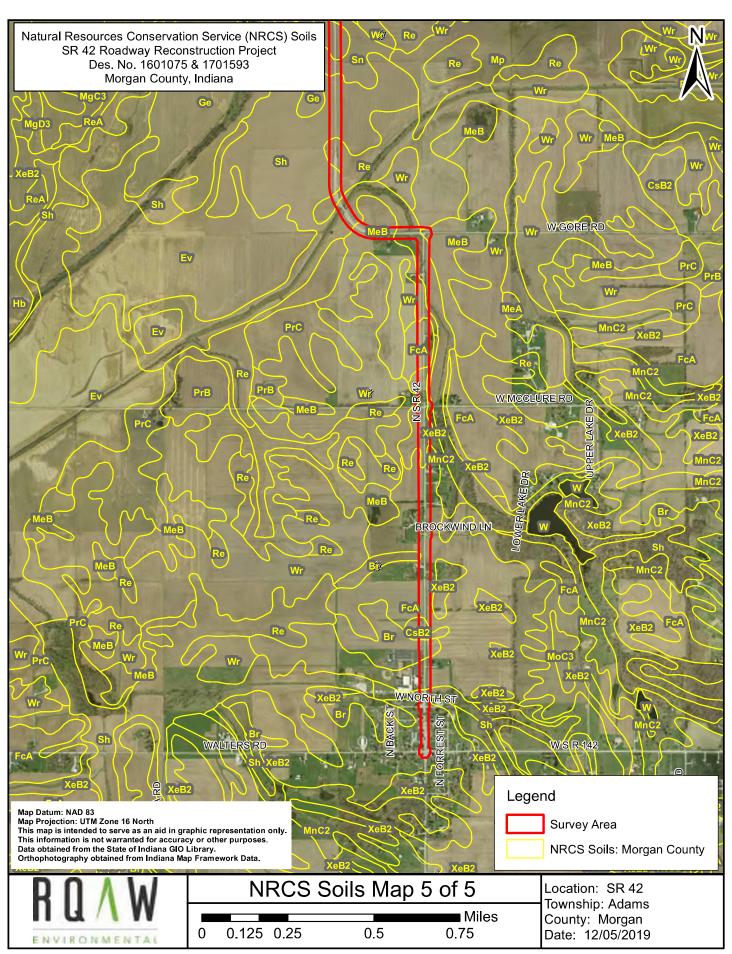
Waters of the U.S. Determination

A10



Waters of the U.S. Determination

A11

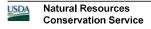


Waters of the U.S. Determination

A12

Report—Hydric Soil List - All Components

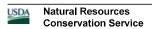
Hyd	ric Soil List - All Comp	onents-IN1	09-Morgan County, Inc	liana	
Map symbol and map unit name	Component/Local Phase	Comp. pct.	Landform	Hydric status	Hydric criteria met (code)
CrA: Crosby silt loam, fine-loamy subsoil, 0 to 2 percent slopes	Crosby	80-100	Recessionial moraines,ground moraines,water-lain moraines	No	_
	Williamstown-Eroded	0-10	Recessionial moraines,ground moraines,water-lain moraines	No	_
	Treaty-Drained	0-5	Depressions,swales,w ater-lain moraines	Yes	2
CsB2: Crosby-Miami silt loams, 2 to 4 percent slopes, eroded	Crosby-Eroded	60-80	Recessionial moraines,ground moraines,water-lain moraines	No	_
	Miami-Eroded	20-35	Recessionial moraines,ground moraines,water-lain moraines	No	_
	Treaty-Drained	0-5	Depressions,swales,w ater-lain moraines	Yes	2
FcA: Fincastle silt loam, Tipton Till Plain, 0 to 2 percent slopes	Fincastle	80-90	Till plains	No	_
	Cyclone	5-15	Flats,depressions,swa les,till plains	Yes	2,3
	Mahalasville	2-10	Depressions on till plains,flats on till plains,swales on till plains	Yes	2,3
MeB: Martinsville loam, 2 to 6 percent slopes	Martinsville	100	Outwash plains,stream terraces	No	_
MnB2: Miami silt loam, 2 to 6 percent slopes, eroded	Miami-Eroded	50-100	Till plains	No	_
	Williamstown	2-15	Till plains	No	_
	Treaty	2-15	Till plains	Yes	2,3
	Crosby	2-15	Till plains	No	_
MnC2: Miami silt loam, 6 to 12 percent slopes, eroded	Miami-Eroded	80-98	— error in exists on —	No	_
	Rainsville-Eroded	0-10	Till plains	No	_
	Treaty	2-10	Till plains	Yes	2,3
	Crosby	0-8	Ground moraines	No	_
Mp: Milford silty clay loam	Milford	100	Depressions on lake plains	Yes	2,3



Web Soil Survey
National Cooperative Soil Survey

11/25/2019

Hyd	ric Soil List - All Comp	onents-IN	109-Morgan County, Inc	liana	
Map symbol and map unit name	Component/Local Phase	Comp.	Landform	Hydric status	Hydric criteria met (code)
Pm: Patton silty clay loam, 0 to 2 percent slopes	Patton	90-95	Depressions	Yes	2,3
	Reesville	0-4	Till plains	No	_
	Wilbur	0-2	Flood-plain steps	No	_
	Wakeland	0-2	Flood plains,flood- plain steps	No	_
	Whitaker	0-2	Outwash plains	No	_
Ps: Pits	Pits	90-100	_	No	_
	Water	0-10	_	No	_
Rd: Reesville silt loam	Reesville	90	Till plains	No	_
	poorly drained aqualfs	1-6	Depressions	Yes	2
	Patton	3	Depressions	Yes	2,3
	Rensselaer	3	Depressions	Yes	2,3
RegA: Rensselaer clay loam, till substratum, 0 to 2 percent slopes	Rensselaer- Frequently ponded, drained, till substra	60-80	Outwash plains,lakebeds,dep ressions,glacial drainage channels	Yes	2,3
	Treaty-Frequently ponded, drained	5-20	Depressions,swales,w ater-lain moraines	Yes	2,3
	Mahalasville- Frequently ponded, drained	5-10	Flats,depressions,swa les,till plains	Yes	2,3
	Rensselaer- Frequently ponded, drained	0-10	Outwash plains,depressions, glacial drainage channels	Yes	2,3
	Whitaker	0-10	Outwash plains	No	_
RuB: Russell silt loam, 2 to 6 percent slopes	Russell	80-100	Till plains	No	_
	Xenia	0-5	Till plains	No	_
	Fincastle	0-5	Till plains	No	_
	Cyclone-Drained	0-5	Depressions,swales	Yes	2,3
	Williamstown	0-5	Recessionial moraines,till plains,water-lain moraines	No	_
Sh: Shoals silt loam, 0 to 2 percent slopes, frequently flooded, brief duration	Shoals	75-95	Flood plains	No	_
	Sloan	0-15	Meander scars,flood plains,backswamps	Yes	2
	Eel	3-5	Flood plains	No	_
	Genesee	0-5	Natural levees,flood plains,flood-plain steps	No	_



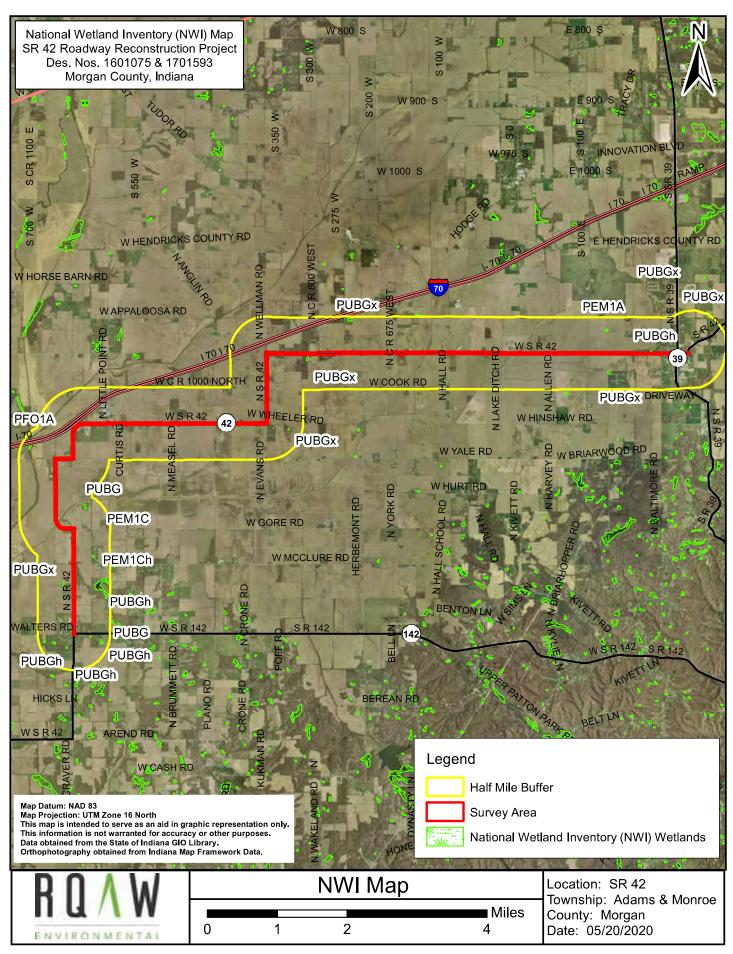
Web Soil Survey
National Cooperative Soil Survey

11/25/2019

Hyd	Hydric Soil List - All Components–IN109-Morgan County, Indiana							
Map symbol and map unit name	Component/Local Phase	Comp. pct.	Landform	Hydric status	Hydric criteria met (code)			
Sn: Sloan silty clay loam	Sloan	100	Flood plains	Yes	2			
ThrA: Treaty silty clay loam, 0 to 1 percent slopes	Treaty-Frequently ponded, drained	70-95	Depressions,swales,g round moraines,water-lain moraines	Yes	2,3			
	Rensselaer- Frequently ponded, drained	0-10	Depressions,ground moraines,glacial drainage channels	Yes	2,3			
	Southwest-Frequently ponded, drained	0-5	Depressions,drainage ways,ground moraines	Yes	2,3			
	Crosby	0-10	Recessionial moraines,ground moraines,water-lain moraines	No	_			
	Pella-Frequently ponded, drained	0-10	Outwash plains,lake plains,ground moraines,till plains	Yes	2,3			
Wr: Whitaker loam	Whitaker	90	Outwash plains,lake plains	No	_			
	poorly drained aqualfs	1-10	Depressions	Yes	2,3			
	Rensselaer	3	Depressions	Yes	2,3			
XeB2: Xenia silt loam, 2 to 6 percent slopes, eroded	Xenia-Eroded	85-95	Till plains	No	_			
	Fincastle	0-5	Till plains	No	_			
	Treaty	0-5	Depressions,till plains	Yes	2			
	Russell-Eroded	0-5	Till plains	No	_			

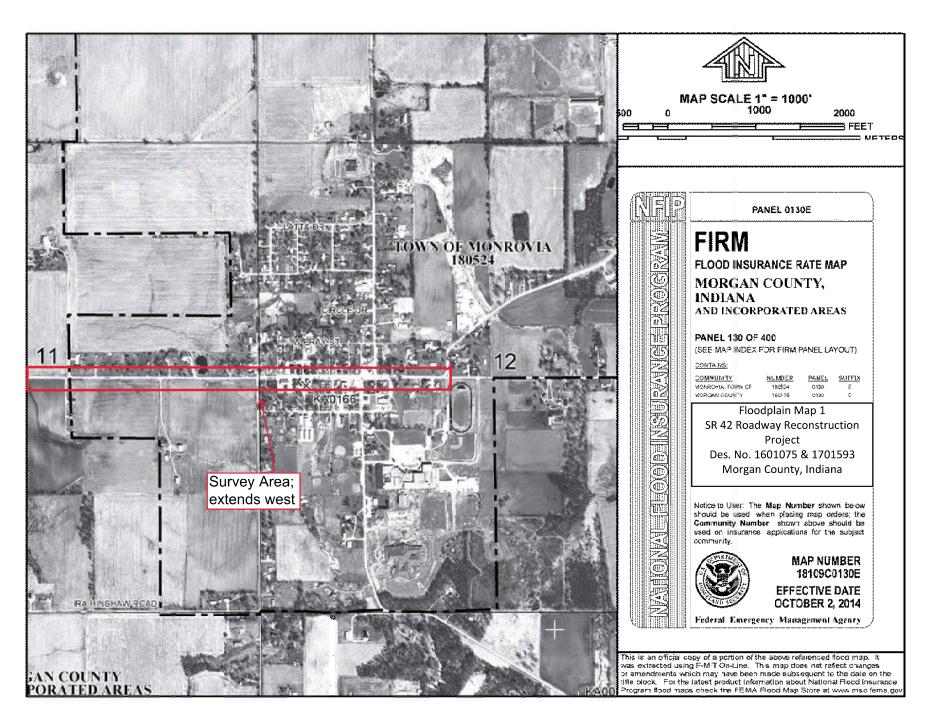
Data Source Information

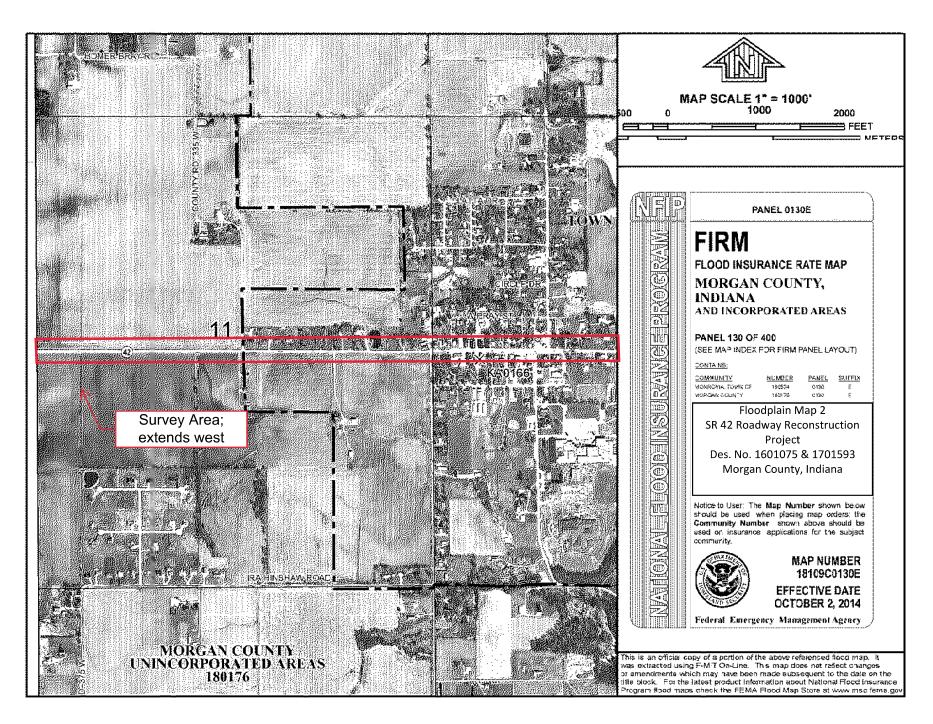
Soil Survey Area: Morgan County, Indiana Survey Area Data: Version 25, Sep 16, 2019

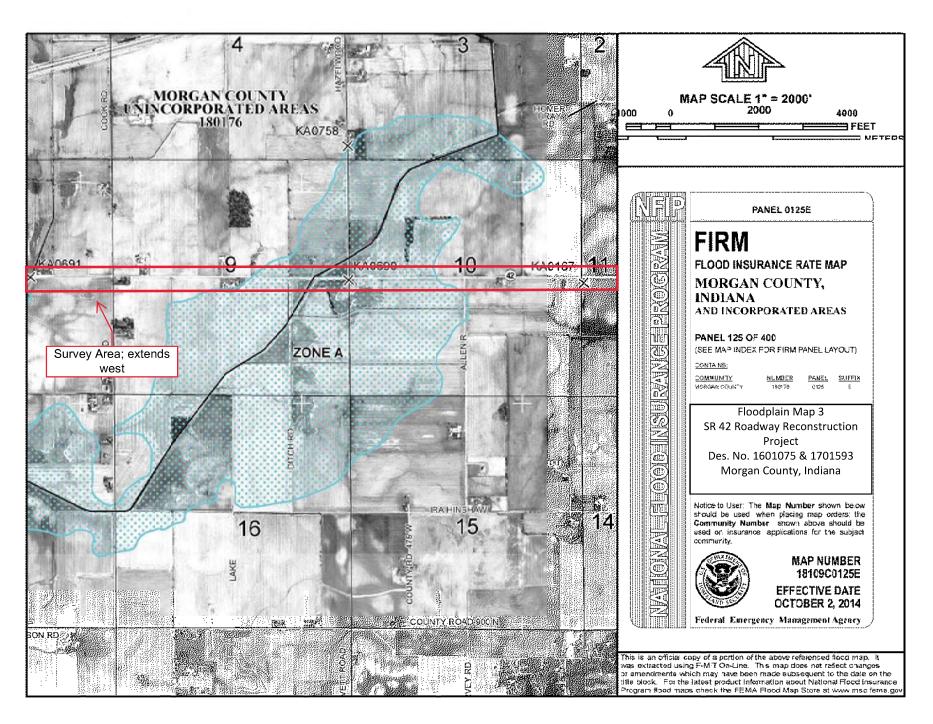


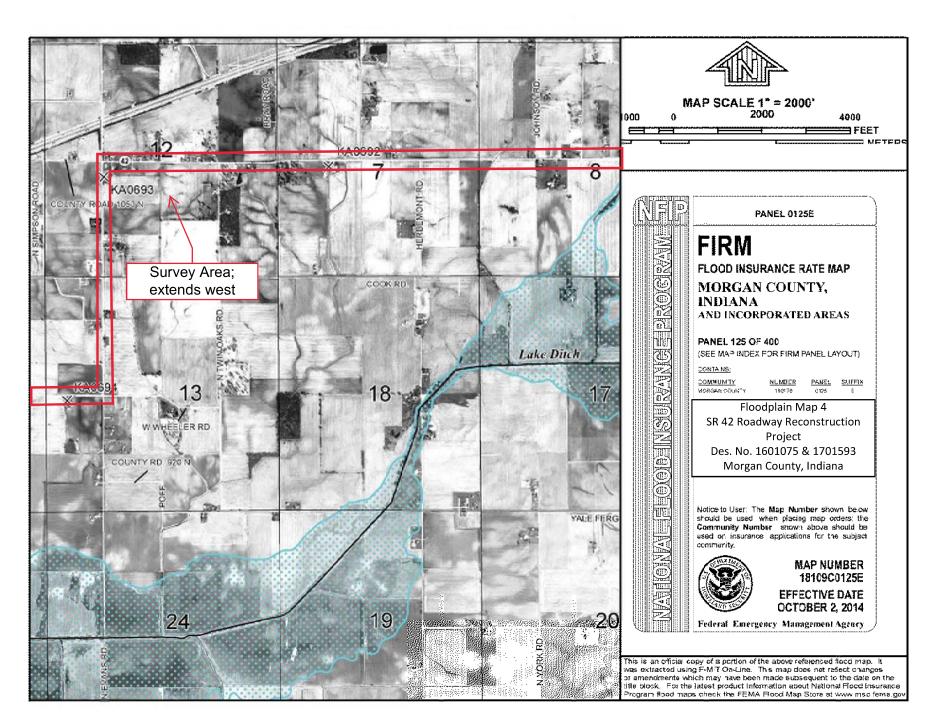
Waters of the U.S. Determination

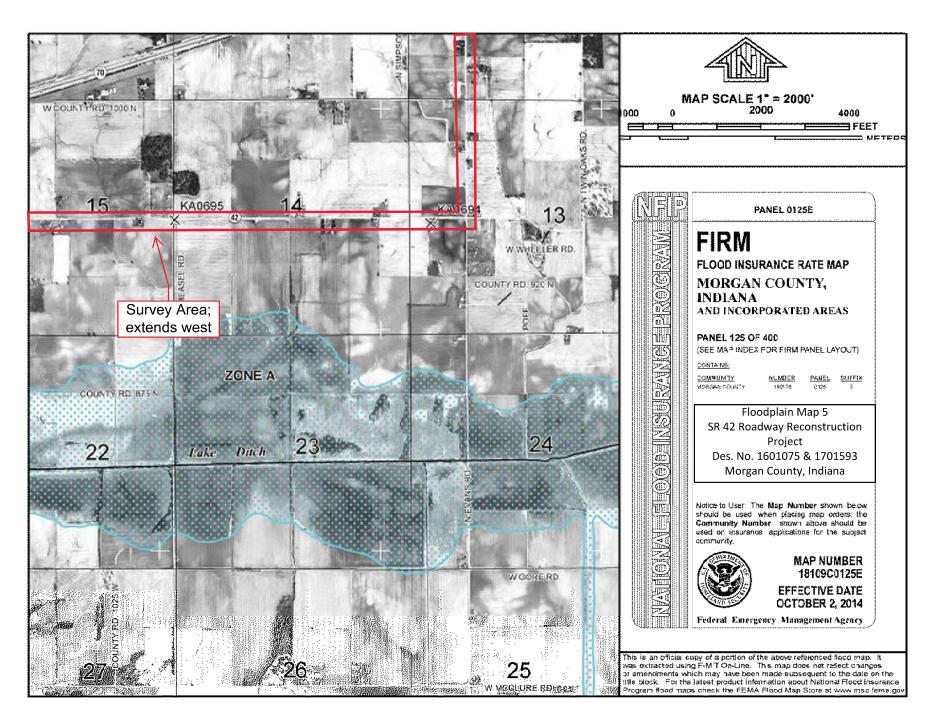
A16

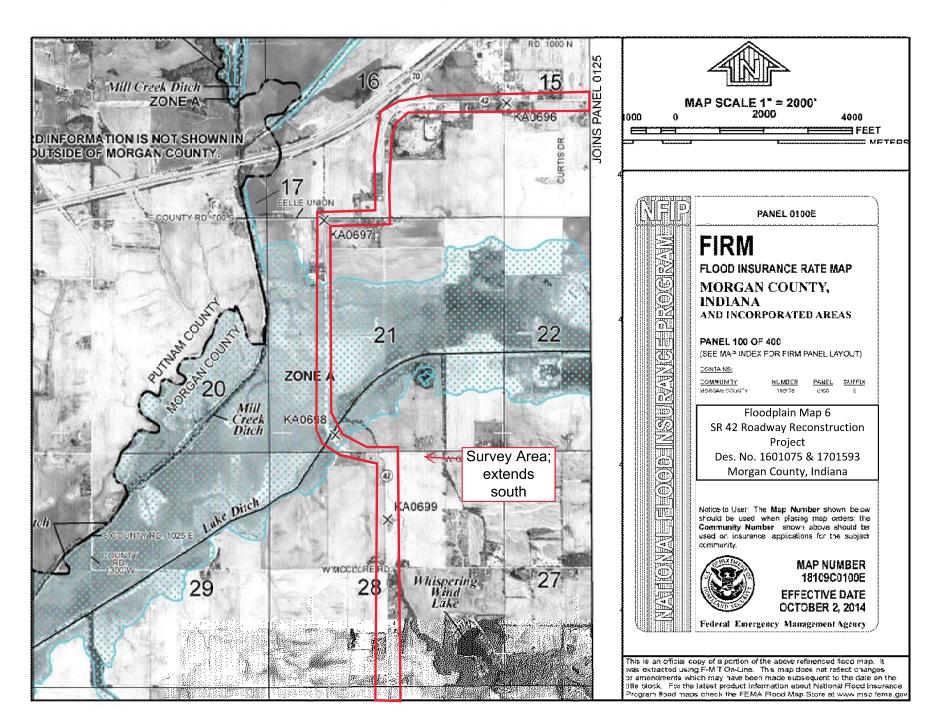


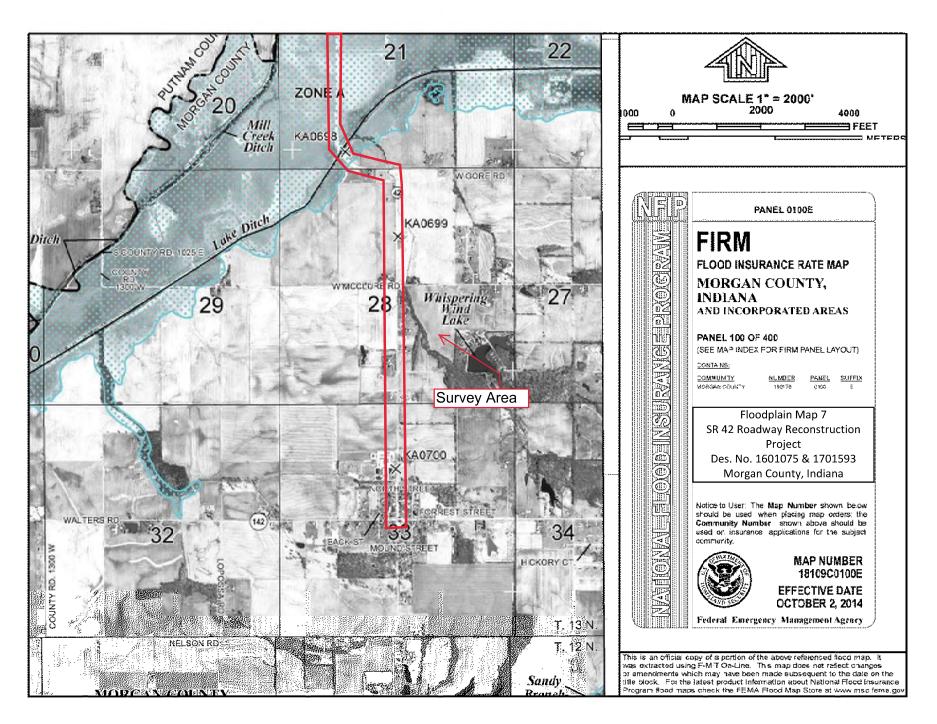


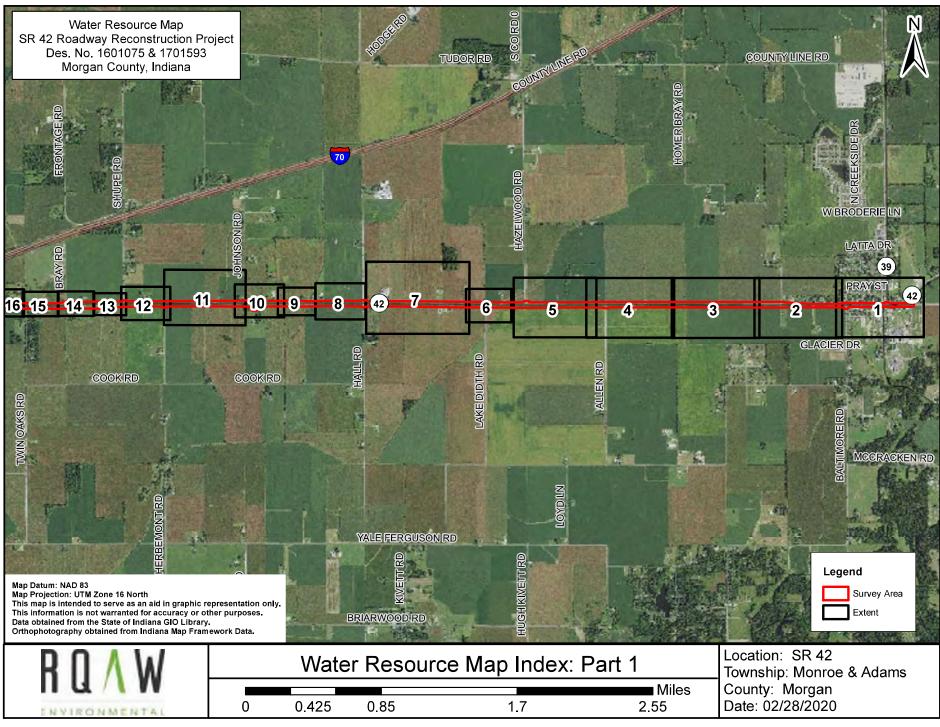


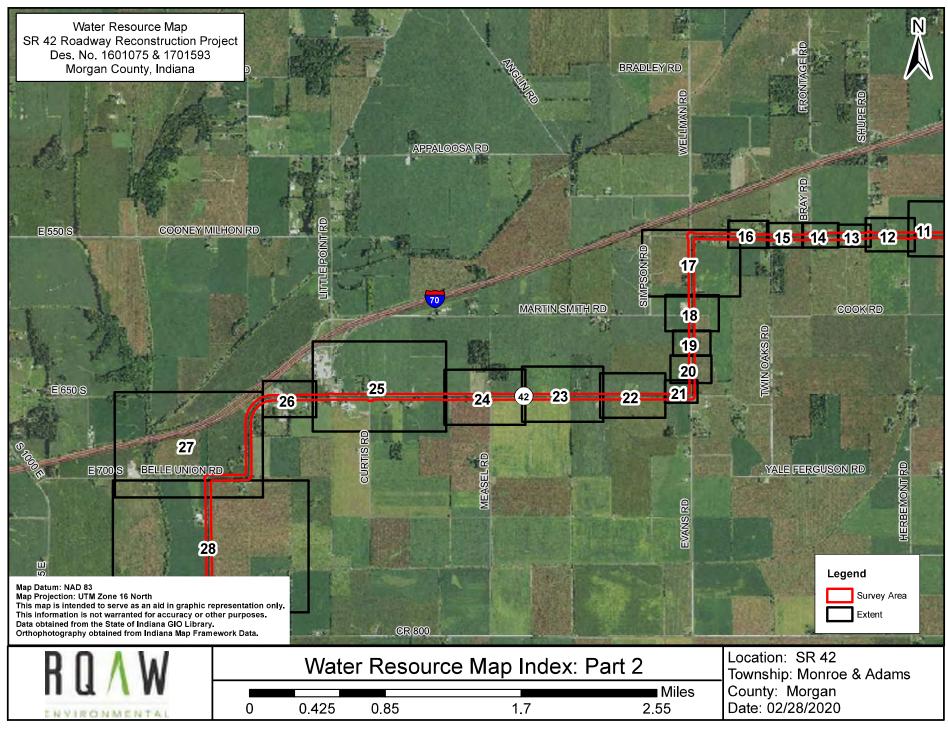






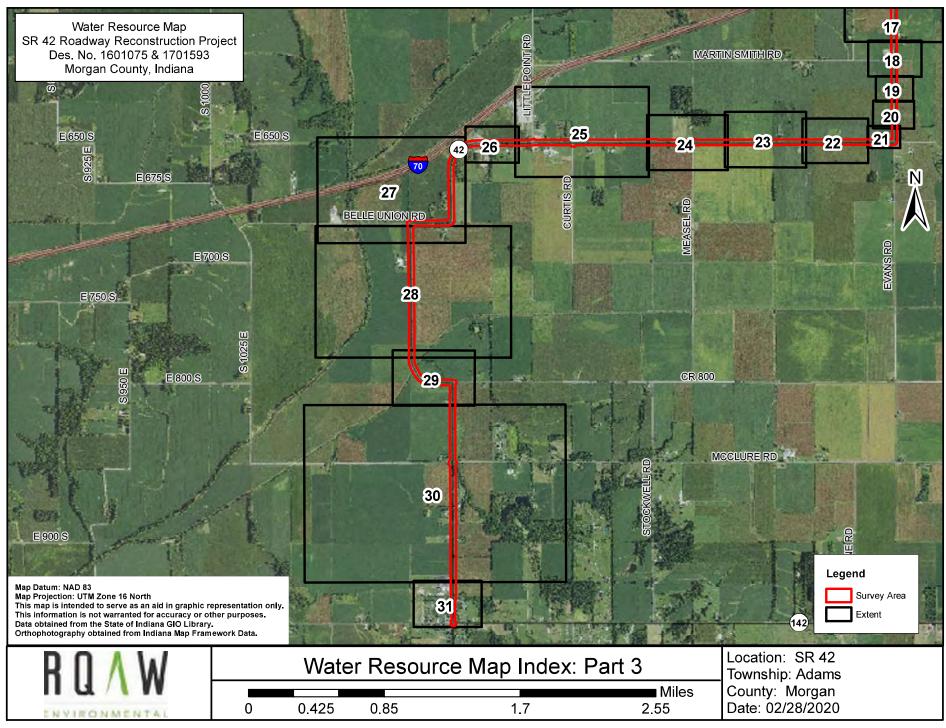


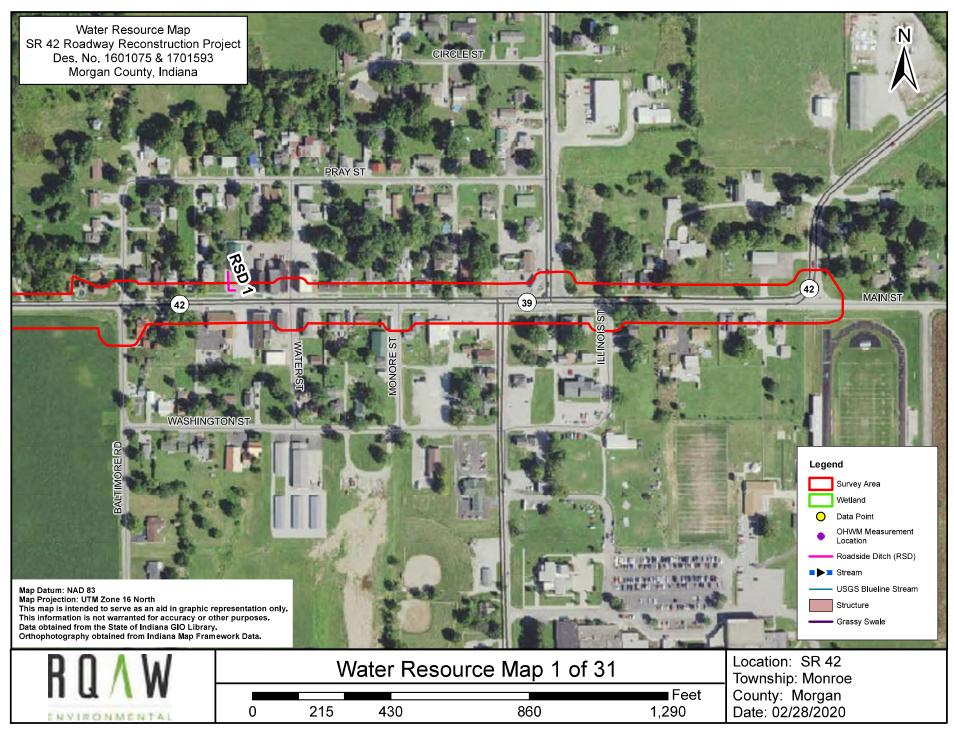




Waters of the U.S. Determination

A25





Waters of the U.S. Determination

A27